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The Scaphidiidae (Coleoptera) of the Nepal Himalaya[1]

by

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With 191 figures

ABSTRACT

The Scaphidiidae are remarkably diverse in the Himalaya. Its more than 200 species represent approximately 15% of the total known world fauna. Most of the species are found in the wetter eastern part of the Central Himalaya and most of its presumably endemic taxa are found at altitudes ranging from 2000 m to 3500 m. Collections made in the West Himalaya are not representative for the regional fauna, and almost no data are available from the East Himalaya. The following taxa are new to science: *Ascaphium ochripes* sp.n., *Episcaphium unicolor* sp. n., *Scaphidium gurung* sp.n., *S. holzschuhi* sp.n., *S. melanogaster* sp.n., *S. nepalense* sp.n., *S. thakali* sp.n., *Pseudobironium bicolor* sp. n., *P. ineptum* sp.n., *P. rufitarse* sp.n., *Baeocera cribrata* sp.n., *B. crinita* sp.n., *B. errabunda* sp.n., *B. laminula* sp.n., *B. martensi* sp.n., *B. mustangensis* sp.n., *B. reducta* sp.n., *B. schawalleri* sp.n., *B. sordidoides* sp.n., *B. thoracica* sp.n., *B. tuberculosa* sp.n., *Scaphisoma adjacens* sp.n. *S. alacre* sp.n., *S. aurorae* sp.n., *S. baloo* sp.n., *S. bhareko* sp.n., *S. clavigerum* sp.n., *S. coalitum* sp.n., *S. fatuum* sp.n., *S. fratellum* sp.n., *S. fulcratum* sp.n., *S. inquietum* sp.n., *S. interjectum* sp.n., *S. invalidum* sp.n., *S. jado* sp.n., *S. kanchi* sp.n., *S. nepalense* sp.n., *S. nima* sp.n., *S. pinnigerum* sp.n., *S. praesigne* sp.n., *S. sikkimense* sp.n., *S. simplicipenis* sp.n., *S. varians* sp.n., *Baeotoxidium yeti* sp.n., *Scaphobaeocera zdenae* sp.n., *Toxidium spectabile* sp.n., *Xotidium* gen.n. *uniforme* sp.n, and *Bironium nepalense* sp.n. New synonymies are: *Yparicum* Achard, 1920 with *Cyparium* Erichson, 1845, *Scaphidium grande* var. *inimpressum* Pic, 1920 and *S. grande* var. *subannulatum* Pic, 1915 with *Scaphidium grande* Gestro, 1879, and *Baeocera pseudolenta* Löbl, 1979 with *Baeocera lenta* (Löbl, 1971). *Ascaphium minor* Pic, 1956 is raised to species level. *Baeocera montanella* is a new name proposed to replace *B. montanum* Löbl, 1971 (nec

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Baeocera montana (Pic, 1955)). New combinations are: *Scaphidium vernicatum* (Pic, 1956) from *Scaphium*, *Scaphidium dureli* (Achard, 1922) and *S. coomani* (Pic, 1925) from *Scaphidiolum*, *Cyparium yunnanum* (Achard, 1920) from *Yparicum*, *Xotidium pygmaeum* (Löbl, 1971), *X. montanum* (Löbl, 1971) and *X. notatum* (Löbl, 1977) from *Toxidium*. Diagnostic characters are given for all species of *Scaphidium*, *Hemiscaphium*, *Cyparium*, and *Pseudobironium* occurring in the area studied. Lectotypes are designated for *Scaphidium arrowi* Achard, *S. coomani* (Pic), *S. harmandi* Achard, *S. semilimbatum* Pic, *S. baconi* Pic, *S. assamense* Pic, *Hemiscaphium brunneopictum* Achard, *Pseudobironium almoranum* Achard, *P. castaneum* Pic, *Scaphisoma minutissimum* Champion, *S. cribripenne* Champion and *S. bedeli* Achard. The genera and species occurring in the Himalaya, in the Meghalaya and in Pakistan are keyed out, as well as all Asian species of *Ascaphium*, *Episcaphium*, *Scaphoxium*, *Toxidium* and *Xotidium*. Distributional data are presented for all Nepalese species, and additional data are given for numerous Indian species.

INTRODUCTION

Mycophagy is a common feature within the Coleoptera. About half of the beetle families include mycophages species and in several families all species are possibly fungivores (Lawrence 1989). This trophic guild is particularly diverse in the tropics. In the Dumoga-Bone National Park in north Sulawesi 23.4% of all sampled Coleoptera were fungivores, while only 17.4% phytophages (Hammond 1990). Obviously all Scaphidiidae feed on fungi (Newton 1984), and they are decidedly more diverse and abundant than sometimes assumed (Paulian 1949; 1988). In samples of forest litter arthropods I have made in different parts of Asia (e.g., in Sri Lanka, India, Thailand, Indonesia, Malaysia) the scaphidiids represent 2 to 6% of the total number of beetles. Surprisingly, this is true also for collections I have made in the mountains of north India in which temperate elements (e.g., Carabidae: *Trechus*, Staphylinidae: *Micropeplus*, *Quedius* and *Tachinus*, Latridiidae: Corticariini, Cryptophagidae: *Cryptophagus*, *Atomaria*) are well represented.

Most of the previous north Indian collections came from the Darjeeling district of West Bengal, and from various localities in Kumaon and Garhwal. Nepal which became accessible on a regular basis for field research since 1949, remained until recently a "terra incognita" located between these two areas with better documented scaphidiid fauna. This circumstance, and the encouragements of my fried Ales Smetana, with whom I undertook three trips to Nepal Himalaya, were significant for realising this paper. It is hoped that it increases substantially the knowledge about the scaphidiids of the Central Himalaya.

As far as the more western portion of the Himalaya is concerned, recent collections from Himachal Pradesh and from north Pakistan, i.e., from the Hindu Kush and Kohistan ranges, provide both fairly signicant data. Unfortunately, almost nothing is known about the scaphidiids (and about other cryptic forest litter Arthropoda as well) from areas east of the Darjeeling district, i.e., from Bhutan and from Arunachal Pradesh. Hopefully, field research will become possible in these areas before the human activity significantly alters the natural ecosystem.

In the beginning was field work...
The descent from Phulcoki to Godawari. The author with samples of sieved forest litter in and on his rucksack (above). Camp in Induwa Khola Valley. Samples are placed in the "Winkler-Moczarski" devices (below).

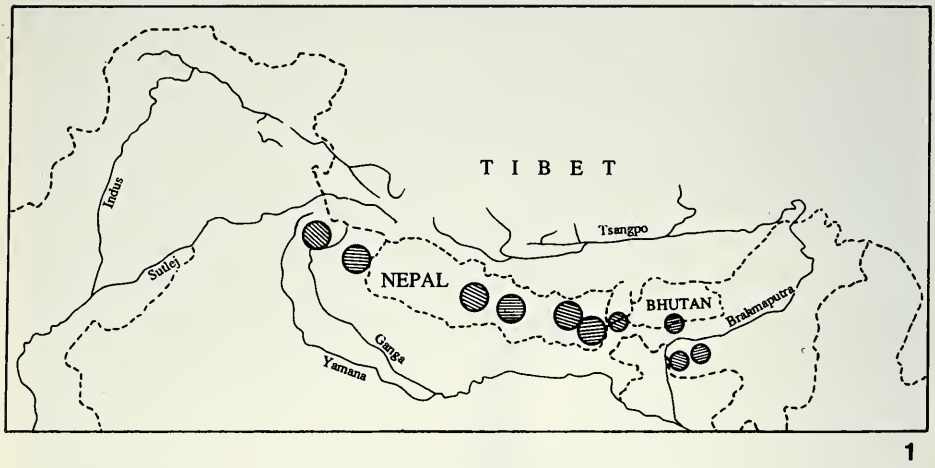


FIG. 1.

Himalayan region. Circles indicate areas from which signicant collections of Scaphidiidae have been made.

TECHNIQUES

Material

This study is based on adults exclusively. Most of the material studied was collected by sifting forest litter and extracted from the samples by means of the "Winkler-Moszarski" devices (see Besuchet & al. 1987).

This method was used not only by Ales Smetana and me, but also by H. Franz, J. Martens & W. Schawaller, and S. Vit. A smaller portion of the scaphidiids was taken from fungi on dead logs, under bark or under decaying pieces of wood on the forest floor. Several specimens, mainly *Scaphidium*, were swept from vegetation or found in Malaise traps. The flight interception traps have been used only once in Nepal by A. Smetana during his 1985 trip. It is possible that this method may provide additional information, especially on *Cyparium* species, which were found in large number in flight interception traps in South and North America by S. & J. Peck. In Thailand, P. Schwendinger used pit-fall traps for collecting arachnids and other forest litter arthropods. They proved to be successful for sampling scaphidiids, although I am not aware of any scaphidiids obtained by this method in the Himalaya.

I have tried to accumulate material from all known sources. The only more important Himalayan collection I know of that was not examined, is that housed in the Forestry Institute in Dehra Dun. It appears not to be accessible for revision.

The Himalayan material available amounted to about 8000 specimens, half of them from Nepal.

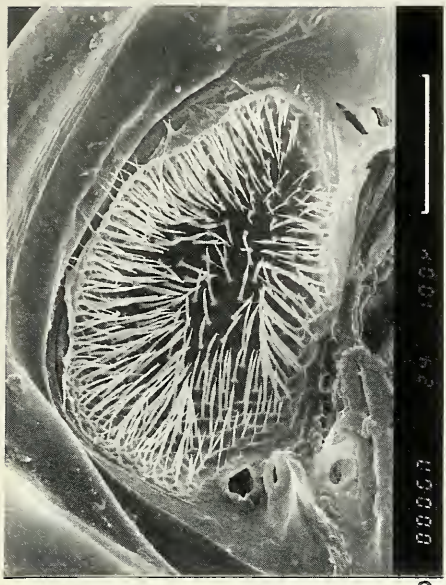
I have published several papers on the Himalayan scaphidiids (Löbl 1970; 1977; 1984; 1986a; 1986b; 1986c; 1987a; 1988; 1990a), in which a number of taxa have been described. Information on several other species occuring in the Himalaya have been given in those relating to the scaphidiids of other areas (e.g. Löbl 1981; 1990b). The diagnostic characters of all these taxa are not repeated in the present study, except for characters used in the keys. All Himalayan members of *Scaphidium*, *Hemiscaphium*, *Cyparium*, and *Pseudobironium* were inadequately described, and were not at all, or only briefly, treated in my previous papers. Therefore, the diagnostic specific characters in these genera are discussed in greater detail.

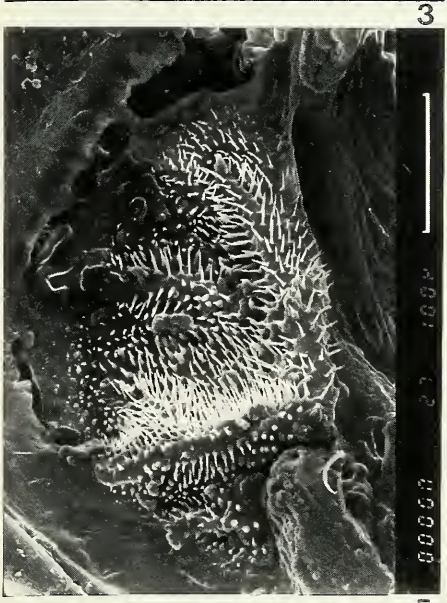
The acronyms of institutions which loaned material or in which material is housed are listed below.

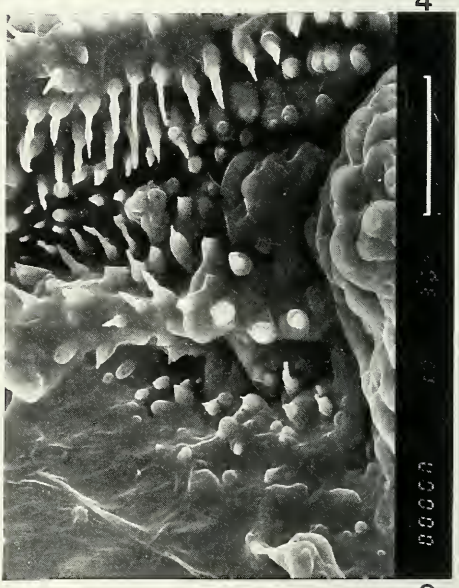
BMNH	The Natural History Museum, London
CNCC	Canadian National Collection of Insects, Ottawa
IZK	Institute of Systematic and Experimental Zoology, Krakow
MCSN	Museo Civico di Storia Naturale, Genova

Fig. 2.

Political division of Napel. Only districts in which treated material was collected are numbered. District bondaries dotted, Zonal bondaries in simple brocken lines, bondaries of Development Centres in double brocken lines. a: Eastern, b: Central, c: Western, D: Far Western, e: Extreme Western Development Centre: 1. Bara; 2. Chitawan; 3. Dhading; 4. Dhankuta; 5. Dolakha; 6. Gorkha; 7. Ilam; 8; Jumla; 9. Kathmandu; 10. Kaski; 11. Lamjung; 12. Manang; 13. Mustang; 14. Myagdi; 15. Nuwakot; 16. Panchthar; 17. Parbat; 18. Parsa; 19. Patan; 20. Rasuwa; 21. Sankhua Sabha; 22. Sindhupalcok; 23. Solukhumbu; 24. Taplejung; 25. Terhathum. Synonymies and alternative transcriptions of district names: Chitawan = Chitwan; Patan = Lalitpur; Sankhua Sabha = Sankhuwasawa, Sankhuwasabha.

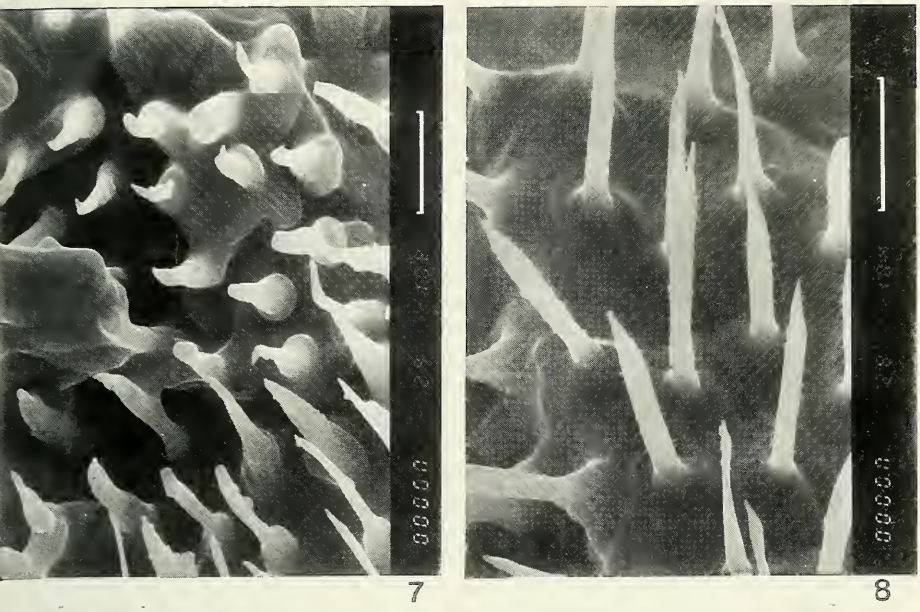






FIGS 3 TO 6.

Prothoracal cavity with "pocket" covered by spinose structures; 3 and 4. *Baeocera* sp., 5 and 6. *Baeocera pubiventris* Löbl.



FIGS 7 AND 8.

Spinose structures of prothoracal cavity in *Baeocera*, detail.

MHNG	Muséum d'Histoire naturelle, Geneva
MNHN	Muséum National d'Histoire naturelle, Paris
NMB	Naturhistorisches Museum, Basel
NMP	National Museum, Prague
NSNT	National Science Museum, Tokyo
SMNS	Staatliches Museum für Naturkunde, Stuttgart
ZSI	Zoological Survey of India

These acronyms, the names of private collections, and the names of collectors are given in paranthesis, when referring to the material studied.

AREA

Most of the material treated in the present study was collected within the political boundaries of Nepal. Additional material comes from Himachal Pradesh, and in much lesser extent from Sikkim or other areas. All identified taxa are keyed as are a few additional unidentified ones, known to occur in the Himalayan region.

The Himalaya comprises the ranges between the rivers Indus and Brahmaputra. The Karakorum and Kohistan - Baluchistan ranges in the west, and the Arakan - Chin - Yoma fold belt and the Mogok belt in the east are of the same orogenesis (MOLNAR & TAPONNIER 1977, MASCLE & al. 1990). While a reasonable set of data is available from some portions of the western ranges, hardly anything is known about the Scaphidiidae of the two eastern fold belts. Therefore, the few species described to date from Burma are not treated in this

paper. For practical reasons, the Scaphidiidae from the Garo and Khasi Hills in Meghalaya, and those from Pakistan, are included in the keys, as well in the discussion on the biogeography. Most of the collected material has been found in areas shown in the Fig. 1.

Distributional records

Nepal occupies a central position within the Himalaya. Since 1980 is it divided into five macro-regions: Eastern, Central, Western, Far Western, and Extreme Western Development Regions (Majupuria & Majupuria 1983). Each of them is sub-divided into two or three Zones (listed sometimes as Provinces) which include a various number of Districts (Fig. 2). This administrative division is respected in the present study, although it does not reflect biogeography.

Indeed, it is often extremely difficult to locate data from locality labels which record the provenience of specimen as "E.Nepal" or "C.Nepal" in combination with a name of a small village, as frequently seen in different collections.

An attempt has been made to arrange the records in east-west or west-east direction. The names of the political units are given once only in the respective material section. The data under "type material" do not appear under "material examined". To avoid misleading information, only one kind of transcription of geographic names is used throughout, regardless of the original spelling on locality labels. Thus all specimens from "Phulcauki" or "Lethe" are quoted as from Phulcoki or Lete.

The difficulties in listing Nepalese material are due to inadequate maps, different ways of transcription and misinterpretation of local information. However, the localities of the numerous expeditions made by J. Martens & al. have been shown on maps in Martens (1987) and in Schawaller (1991). The collecting sites of A. Smetana and me are shown on maps in Smetana (1988). For more information see the above papers.

All data are based on material I have examined.

Diagnostic characters

The length of the specimens is measured from the middle of the apical pronotal margin to the inner apical angle of the elytra. Width is measured at the largest point. Size and colour pattern of teneral specimens was not taken in account. The relative length of antennomeres is measured at the same magnification (see Löbl 1974; 1990b). In *Scaphisoma*, the level of inner and outer apical angles of elytra is compared in dorsal view. The indicated size of the metepisternum refers to the free visible portion. Abdominal sterna are counted from the beginning of the first visible free segment, i.e., 3rd sternum. Mouthparts and genitalia are mounted in Canadian balsam. For more details see Löbl (1990b).

The presence or absence of the microsculptured patches on the 6th abdominal tergum is not examined for the diagnostic purpose. It is covered by the elytra and the wings, and not easy to see. The characters of the mouthparts are not used below genus level and potential species characters in chaetotaxy have not been investigated.

The prothorax includes a pair of internal cavities (or pockets) covered by dense spinose or setose structures (Figs 3 to 8) in several genera. Newton (1984) was the first to record the presence of this unusual feature in scaphidiids, and thought that they may function as mycangia or spore-retaining structures. These cavities are usually distinct when viewed under a stereoscopic microscope, when the prothorax is separated from the mesothorax. The fine structure as seen in scanning electron micrographs shows significant differences among the species of same the genus (i.e., *Baeocera*, Figs 3 to 8). I have not

seen these cavities in any of the examined species of the *Scaphium-Scaphidium* groups, neither in *Cyparium*, *Scaphisoma*, *Caryoscapha*, *Afroscaphium*, *Toxidium*, *Scaphischema*, *Scaphicoma*, *Sapitia*, and *Baeoceridium*. They are present in all the specimens of *Pseudobironium*, *Baeocera*, *Scaphobaeocera*, *Scaphoxium*, *Baeotoxidium*, *Xotidium*, *Brachynopus*, *Brachynoposoma* and *Zinda* examined, and are particularly well developed in *Pseudobironium*. It is likely that the internal thoracic cavities evolved independly in different groups, as these genera do not form a holophyletic group.

The anapleural suture separating the metasternum from the mesepisternum is always distinct in Scaphidiidae. Most members of the group exhibit a subparallel ridge or stria joined to the anapleural suture more or less close to the mesocoxal cavity (but never reaching its margin), delimiting a small area believed to be the mesepimeron by previous authors. A.F. Newton, Jr. (pers. comm) suggested that this area cannot be the mesepimeron, because of the absence of a corresponding internal suture, and because it never extends to the coxal cavity. The examination of the internal surface of the mesothorax I have made in several scaphidiids confirms his observation. However, the relative length of the visible ridge (or stria) is an useful species character in some groups, especially in *Scaphisoma*. It is named "mesepimeral ridge" in this paper.

Primitively, the parameres of the aedeagus are facing the ventral side of the body. In some groups the aedeagus has rotated 90 degrees (e.g., in *Scaphium*, *Baeocera*, *Scaphobaeocera*), with dorsal side facing the right side of the body. In this study the ventral/dorsal/lateral sides are referred to as their plesiomorphic position. Similarly, the "right" and "left" sides of the aedeagus are referred to as primitive within the abdomen which is inverted in the figures. The ventro-apical wall of the basal bulb of the median lobe is strongly sclerotized, being the site of the attachment of the parameres. This area is often more or less protruding, or even forms an apophysis longer than the basal bulb in some species of the *Scaphisoma unicolor* group. In this study this structure is referred as the ventral process.

NATURAL HISTORY AND ECOLOGY

The occurence of sporophores is inpredictible and often ephemeral. Thus, there is a tendency toward polyphagy in fungivores. In addition, polyphagy in mycophagous insects may be explained by its low cost (Hanski 1989). The scaphidiids, which are putative primary fungivores, are generally found on living fungi (e.g. Klimaszevski & Peck 1987), although exceptions may occur. Large numbers of *Scaphium castanipes* Kirby have been attracted to traps made from an assortiment of fungi in the Yukon Territory (Smetana, pers.comm.), and the polyphagy in scaphidiids has been reported several times, e.g., Ashe 1984, Hammond & Lawrence 1989, Leschen 1988, Leschen & al. 1990, Newton 1984, Nuss 1975. Obviously, most species feed either on fruiting bodies of slime moulds (*Baeocera*, *Scaphobaeocera*), or on hyphae of Polyporaceae and Agaricales. Gilled fungi are source for few groups only, e.g., *Scaphium castanipes*, *Cyparium* (Ashe 1984, Newton 1984). The only biological data on Himalayan scaphidiids are given in Newton & Stevenson, 1990.

Details of the life history of any scaphidiid species have yet to be established. Most species seem to lay a single egg (pers. observation). Information on morphology of immature stages is summarized in Newton 1991, and additional pertinent information is

given in ASHE 1984, KOMPANTSEV & POTOTSAKAYA 1987, LAWRENCE & NEWTON 1980, and LESCHEN 1988. Three larval instars are recorded for *Caryoscapha americanum*. The larval development in *Baeocera* is very rapid, taking only a few days (NEWTON 1991), pupae in *Scaphisoma* and *Caryoscapha* were observed after 11 days, and adults emerged 17 to 41 days after collecting date (LESCHEN 1988).

Scaphidiids occur from spring to winter in temperate climate (LÖBL & STEPHAN 1993; pers. observation). Usually, Himalayan records are from samples made during the spring and in autumn. This tends to reflect the sampling activity rather than the phenology: heavy snowfall at higher elevation and drought at lower altitudes make collecting difficult, if not impossible in winter. Collecting mycophagous beetles such as scaphidiids is harder during the summer monsoon rainfall.

The altidutinal records indicate highest diversity of the Himalayan scaphidiids between 1000 and 2500m, but several species were found above 3000m (e.g., *Scaphidium biundulatum*, *Baeocera microptera*, *B. crinita*, *B. thoracica*, *B. errabunda*, *Scaphisoma inquietum*, *S. aurorae*, *S. jado*, *S. clavigerum*, *S. sikkimense*, *S. bhareko*), and one (*Baeocera microptera*) is found at 4000 m. Since Myxomycetes have been recorded at 4800 m in Khumbu Himal (POELT 1967) the *Baeocera* may occur above 4000 m. In my oppinion, the relative paucity of data from lower elevations (Terrai, Siwaliks, Dum-valleys), is due to greater interest in the study of higher altitude habitats with, presumably, endemic species, an unfavourable climate repelling researchers, the short period in year favourable for sampling, and difficulties in locating suitable sampling sites.

Scaphidiids often aggregate and several species may cohabit on a single fungus growth (LÖBL 1986b). Unlike many other fungivorous beetles (e.g., Ciidae, Pterogeniidae, Tenebrionidae) they have not developed any secondary sexual characters which are correlated with food or mating competition.

SYSTEMATICS

TAMANINI (1969) subdivided the scaphidiids in two groups of family level, the Scaphidiidae and the Scaphisomidae. This has not been followed by any subsequent worker. To the contrary, KASULE (1966) reduced the scaphidiids to a subfamily of the Staphylinidae, and several modern authors (e.g., KASULE 1968, LAWRENCE 1982, HAMMOND & LAWRENCE 1989) treated them as a subfamily. LAWRENCE & NEWTON (1982) considered the scaphidiids as a possible member of the oxyteline group. NAOMI (1985) retained the family rank for scaphidiids, and considered them be the sister group of the scydmaenids with which they constitute the sister group of his Oxyporidae. For practical reasons, I prefer to treat the group as a family, in view of the still insufficient knowledge of the phylogeny of the Staphylinoidea. The classification and suprageneric names proposed by ACHARD (1924a) are not used here, as in any of my previous papers.

Geographic variation has been little examined and clines are unknown within the scaphidiids. Only three species have been found to be polytypic. Two of them, *Baeocera mussardi* and *Scaphisoma assimile*, are represented each by a subspecies in the studied area. The polytypy in these species is based on minor discontinuous morphological characters. Their aedeagi do not exhibit any distinguishing characters compared with the nominate subspecies (e.g., Fig. 149). For more detail see LÖBL (1963; 1979). The taxonomic treatement in these cases reflects rather typological than biological thinking.

Key to the genera of Scaphidiidae of continental Asia
(genera not recorded from the Himalaya in parenthesis)

1 Segments of antennal club symmetrical. Scutellum large, visible. Robust species. Procoxal cavities closed apically 2
– Segments VII to XI always, XI often, asymmetrical. Scutellum not visible, or only small apical portion point exposed. Usually small, graceful species. Procoxal cavities open apically 7
2 Eye not notched 3
– Eye notched 4
3 Occipital region visible. Basal segment of metatarsus short. Elytron with longitudinal striae. Prosternum long. Tibiae without rows of spines ..... *Scaphium* Kirby
– Head retracted into thorax to eye margin. Basal segment of metatarsus long. Elytron without longitudinal striae. Prosternum narrow. Pro- and mesotibia with rows of spines ..... *Cyparium* Erichson
4 Base of elytron impressed to receive extended basal angle of pronotum. Centre of metasternum pubescent in male. Head retracted into pronotum 6
– Base of elytron not impressed, basal pronotal angle not prolonged apically. Metasternum glabrous in both sexes. Head with occipital region visible 5
5 Elytral disc with rows of longitudinal, deep, punctate striae ..... *Ascaphium* Lewis
– Elytral disc without striae ..... *Episcaphium* Lewis
6 Mesosternal keel bifid basally ..... *Scaphidium* Olivier
– Mesosternal keel simple ..... *Hemiscaphium* Achard
7 Third antennomere short, triangular 8
– Third antennomere elongate, subcylindrical 11
8 Body appearing glabrous, setae usually restricted to punctures 9
– Body conspicuously pubescent 10
9 Apical segment of maxillary palpus slender, tapering, without any stria ..... *Scaphisoma* Leach
– Apical segment of maxillary palpus flattened, triangular, with striate outer margin ..... *Caryoscapha* Ganglbauer
10 Mesepimeral ridge distinct ..... (*Sapitia* Achard)
– Mesepimeral ridge absent ..... *Mystrix* Champion
11 Basal pronotal angle almost always extended to or beyond level of anapleural suture. Mesepimeral ridge distinct. Antennal insertion situated near clypeal suture 12
– Basal pronotal angle never extended apically and not reaching level of anapleural suture. Mesepimeral ridge usually obsolete. Antennal insertion situated more or less far from clypeal suture 14
12 Meso- and metacoxae distant ..... *Baeocera* Erichson
– Meso- and metacoxae strongly approximate 13
13 Elytron with parasutural stria, discal surface usually distinctly microsculptured ..... *Scaphobaeocera* Csiki
– Elytron without parasutural stria, and disc not microsculptured ... *Baeotoxidium* Löbl
14 Body narrow. Meso- and metacoxae approximate 15
– Body wide. Meso- and metacoxae distant 18
15 Third antennal segment curved. Hypomeron explanate basally, with margin distinctly convex ..... *Scaphoxium* Löbl
– Third antennal segment straight. Hypomeron not explanate basally, with margin almost straight 16
16 Meso- and metatarsus notably longer than respective tibia *Scaphicoma* Motschulsky

– Meso- and metatarsus about as long as respective tibia 17
17 Elytron with basal stria entire, joined to sutural and lateral striae. Labial palpus 2-segmented ..... *Xotidium* gen. n.
– Elytron with basal stria usually interrupted laterally, sutural stria shortened. Labial palpus 3-segmented ..... *Toxidium* Le Conte
18 Legs and antennae conspicuously long. Antennal segments III to XI very thin. Antennal insertion situated near upper margin of eye ..... *Bironium* Csiki
– Legs an antennae moderately long. Antennal segments III to XI robust. Antennal insertion situated near clypeal suture 19
19 Antennomere XI asymmetrical, moderately longer than preceding segment, segments VII to X elongate ..... *Pseudobironium* Pic
– Antennomere XI symmetrical, conspicuously long, longer than two preceding segments combined, segments VII to X short ..... (*Amaloceromorpha* Pic)

Scaphium Kirby

Scaphium Kirby, 1837; type species: *Scaphium castanipes* Kirby, 1837, by monotypy.

This genus includes four species: the Nearctic *S. castanipes* Kirby, the Asian *S. quadraticolle* Solsky, *S. immaculatum* (Olivier) from Central Europe and Mediterranean area, and *S. ferrugineum* Reitter of presumed South African origin (Reitter 1880). *Scaphium vernicatum* Pic from China is hereby transferred to *Scaphidium*, comb. nov.

Scaphium quadraticolle Solsky from ex "Soviet Central Asia" has been recently recorded from northern Pakistan (Löbl 1986b). A new record is "Naltartal, Umg. Jagot, 1-4.VIII.1974 F. Gartner",one specimen found by the Austrian Karakorum Expedition (Coll. H. Franz). It is possible that the range of this species extends to the Himalaya.

Ascaphium Lewis

Ascaphim Lewis, 1893; type species: *Ascaphium sulcipenne* Lewis, 1893, by present designation.

Members of *Ascaphium* have conspicuously striate elytra as those of *Scaphium*, but they differ from the latter by the elongate basal segment of the metatarsus. The genus includes five species and one "variety" which is here elevated to species rank. An additional species occurs in Nepal. The range of *Ascaphium* extendes from Japan, China and North Vietnam to Central Himalaya.

Key to the species of *Ascaphium*

1 Elytron with sutural, marginal, and six discal striae ending almost at same level near elytral apex 2
– Elytron with four inner discal striae ending far from apical margin, outer stria or striae reduced..... 5
2 First and third discal striae joined near elytral apex, beyond second stria ..... *tonkinense* Achard
– Elytron with discal striae not joined apically 3
3 Row of sub-basal pronotal punctures sparse, more or less interrupted, not impressed in middle. Body and femora black, tibiae, tarsi and antennae bright ochreous ..... *ochripes* sp.n.

– Pronotum with impressed dense row of sub-basal punctures. Femora and tibiae uniformly dark, or apical portion of tibiae somewhat paler than femora 4

4 Second and third elytral striae starting at base and joined with basal stria .... *sulcipenne* Lewis

– Second and third elytral striae starting beyond base and not joined with basal stria ..... *sinense* Pic

5 Pronotal disc very finely punctate, punctures on pronotal centre much smaller than those on frons ..... *minor* Pic (status nov.)

– Pronotal disc and frons about equally, coarsely punctate 6

6 Length 3.2 - 3.5 mm. Antennal club dark with distinctly paler apical segment. Mesosternal keel low, with straight horizontal margin in lateral view .. *apicale* Lewis

– Length 3.8 - 4.5 mm. Antennal club unicolorously dark or with apical portion of last sement somewhat paler. Mesosternal keel high, with sinuate margin in lateral view..... *tibiale* Lewis

Ascaphium ochripes sp.n.

Holotype, female: Nepal, Sankhua Sabha distr., Chichila, 2200m, 24.IV.1984 (Löbl & Smetana) (MHNG).

D i a g n o s i s . Large-size species with ochreous tibiae and tarsi (Fig. 9). Subbasal row of pronotum sparse. Elytral disc with 1st and 2nd striae not joined with basal stria, 3rd joined with basal stria, 1st and 2nd striae joined apically. Metasternal grooves long, approximate.

D e s c r i p t i o n . Length 6 mm. Body, head and femora black. Apex of abdomen, tibiae, tarsi, antennae and palpi bright ochreous. Frons at narrowest point 0.31 mm, with fine and sparse punctation becoming denser and coarser apically, vertex with punctures larger than intervals. Antennae long, with segments VII to X about 2.5x as long as wide, and XI almost 3x as long as wide. Pronotum at base 2.6 mm wide, with lateral margin oblique in basal half, arcuate in apical half (dorsal view); sub-basal row of punctures irregular, sparse, in central portion more or less interrupted, laterally impressed. Elytron with straight basal stria and six deep discal striae (in addition to sutural and marginal striae): 1st and 2nd starting just beyond basal stria and not joined with latter, joined together apically; 3rd joined with basal stria, 4th starting laterally of basal stria, 3rd and 4th weakly incurved and somewhat longer than 1st or 2nd; 5th and 6th starting almost at same level behind humeral callosity, not or barelly incurved apically and almost as long as 4th. All striae distinctly punctate, extended to narrow, irregularly puncate apical area of elytron. Intervals convex, very finely punctate. Apical area not flattened, with fine and shallow punctures. Mesosternal keel gradually lower toward apical margin, with ridge horizontal in apical half (lateral view). Metasternal median grooves long, approximate, moderately convergent, each delimited by elongate apical impression. Protibia straight, mesotibia weakly sinuate, metatibia weakly incurved.

R e m a r k s . This species may be readily distinguished by its colour pattern in combination with the sparse row of the sub-basal punctures of the pronotum. It shares long lateral elytral striae and the large size of body with *A. sulcipenne*, *A. sinense*, and *A. tonkinense*. The remaining species, *A. apicale*, *A. tibiale*, *A. minor*, and undescribed species from Burma and Taiwan represented in the MHNG, have reduced lateral striae and shortened four discal striae. *Ascaphium minor* was described as a variety of *A. sinense* (Pic, 1956) although it differs conspicuously from the latter in many characters, including in the much smaller size.

Episcaphium Lewis

Episcaphium Lewis, 1893; type species: *Episcaphium semirufum* Lewis, 1893; by monotypy.

This is a small genus confined to Asia. The type species occurs in Japan, the second member, *E. saucineum* (Motschulsky) in Sri Lanka, and *E. unicolor* sp.n., described below, in Eastern Nepal.

Key to the species of *Episcaphium*

1 Elytron pale, with dark transverse fasciae in centre and along apical margin. Median process of mesosternum not margined, mesosternal transverse keel-line absent .... *saucineum* (Motschulsky)
– Elytron uniformly reddish-brown 2
2 Head, pronotum and elytra unicolored. Middle portion of 1st ventrite not microsculptured ..... *unicolor* sp.n.
– Head black, thorax black or reddish, elytra and abdomen reddish or ochreous. Entire first abdominal ventrite microsculptured ..... *semirufum* Lewis

Episcaphium unicolor sp.n.

Holotype, male: Nepal, Sankhua Sabha distr., Arun Valley, Lamobagar Gola, 1000 - 1400 m, 27.V. - 3.VI.1980 (Holzschuh) (MHNG).

Paratype, male: Nepal, Taplejung distr., SE Yamputhin to Yamputhin, 2000 - 1650 m, mainly Alnus forest, 26. and 30.IV.1988 (Martens & Schawaller) (SMNS).

D i a g n o s i s . Body and legs uniformly reddish-brown. Metasternum with two small apico-median tubercles. Middle portion of first ventrite with obsolete microsculpture.

D e s c r i p t i o n . Length 3.2 - 3.6 mm. Body and legs reddish-brown, antennomeres I to VI ochreous, following segments dark brown to blackish. Punctation on frons finer than that on vertex. Pronotum with lateral margins weakly sinuate in dorsal view, disc almost evenly arcuate in lateral view, not impressed near base; sub-basal row formed by coarse punctures. Elytron with four or five discal rows of moderately large punctures, intervals finer and irregularly punctate. Apical area flattened, bearing shallow large punctures situated very closely to each other. Median mesosternal process with raised, keel-like margins extended laterally and forming transverse keels joined with apico-lateral margins of mesosternum. Metasternum entirely very finely punctate, with two small elongate medio-apical tubercles; surface flat between and laterally tubercles, impressions absent. Abdominal segments sparsely and very finely punctate, with microsculpture consisting of punctures, except middle portion of 1st ventrite lacking microsculpture. Meso- and metatibia incurved. Segments 1 to 3 of male protarsi distinctly enlarged. Aedeagus 1.12 - 1.19 mm long. Median lobe with curved apical portion and robust ventral process. Internal sac bearing pair of bifid, slender sclerites situated at base of thin laminar structure. Latter narrowed and incurved apically. Membranes of internal sac extremely finely denticulate apically, with setose structures in centre, and with extremely fine scale-like proximal structures.

R e m a r k s . *Episcaphium unicolor* shares the margined mesosternal process and the transverse mesosternal keel with *E. semirufum*. It may be distinguished from the latter species by the colour pattern, the vertex with punctures coarser than those on the frons, the

finer punctures of the sub-basal pronotal row and of the elytral rows, and by the obsolete microsculpture on the middle portion of the 1st abdominal ventrite.

Scaphidium Olivier

Scaphidium Olivier, 1790; type species: *Scaphidium quadrimaculatum* Olivier, 1790, designated by Leach 1815.
Isoscaphidium Achard, 1922 (sg); not validated by designation of type species.
Hyposcaphium Achard, 1922 (sg); not validated by designation of type species.
Pachyscaphidium Achard, 1922 (sg); type species: *Scaphidium arrowi* Achard, 1920, by monotypy.
Parascaphium Achard, 1923; type species: *Scaphidium optabile* Lewis, 1893, by monotypy.

Scaphidium with over 200 species is distributed over all major regions but absent from oceanic islands and from areas with cool climate. ACHARD (1922a) defined four subgenera, all based on overall similarities. He failed to place most of the species validly described to that date in any of these subgenera. They were used in papers dealing with the Japanese species (SHIROZU & MORIMOTO 1963, LÖBL 1967) but ignored by most of the other authors (i.e., CHAMPION 1927, MIWA & MITONO 1943, LÖBL 1975b and 1976a). Actually, roughly 90% of the species of *Scaphidium* have not been assigned to any subgenus. In absence of defined species groups based on autapomorphies the subgeneric names are not used for the 20 Himalayan species treated below. Three of these species, *S. biundulatum* Champion, *S. gurung* sp.n. and *S. nepalense* sp.n., all with obviously restricted ranges at higher altitudes, are possibly relatives of *S. quadrimaculatum* Olivier. *Scaphidium arrowi* Achard from "British Bootang" belongs likely to the same group. This species and *S. dureli* Achard have not been found in any modern collection, and I have not located their type localities.

The remaining species were collected at lower altitude and are or seem to be widely distributed.

Scaphidium incrassatum Achard from Burma is represented in the MHNG by a specimen labelled "Assam". The species is not included in the key but may be easily recognised by colour pattern of the elytra (Fig. 12). *Scaphidium clatratum* Achard and *S. ocellatum* Achard from "Assam" are not included in this study.

KEY TO THE HIMALAYA SPECIES OF *Scaphidium*

1 Pronotum and elytra unicolored 2
– Pronotum and/or elytra bicolored 8
2 Dorsal surface of body ochreous 3
– Body blackish-brown to black, elytra and pronotum sometimes with bluish or violaceous shine 4
3 Thorax ochreous ventrally ..... *cinnamomeum* Champion
– Thorax black ventrally ..... *melanogaster* sp.n.
4 Meso- and metafemur black with reddish transverse fascia. Species 6 to 7 mm long ..... *grande* Gestro
– Femora uniformly dark. Smaller species 5
5 Elytra and pronotum violaceous or bluish, remaining surface of body black ..... *cyanellum* Oberthür
– Elytra and pronotum blackish brown or black 6

6 Elytral disc with distinct longitudinal rows of coarse punctures ..... *biseriatum* Champion
– Elytral disc without trace of rows of coarse punctures 7
7 Lenght 6 mm. Lateral pronotal margin sinuate in dorsal view. Male profemur not keeled ..... *dureli* (Achard)
– Length 4.5 mm. Lateral pronotal margin not sinuate in dorsal view. Male profemur keeled ventrally ..... *thakali* sp.n.
8 Elytron black or blackish-brown, with single reddish sub-basal fascia 9
– Colour pattern of elytron different 10
9 Male profemur with ventral tooth ..... *sylhetense* Achard
– Male profemur with several ventral tubercles ..... *holzschuhi* sp.n.
10 Elytron black or blackish, with two ochreous or yellowish fasciae or spots 11
– Colour pattern of elytron different 16
11 Pronotum uniformly black 12
– Pronotum black with reddish pattern 15
12 Elytron with wide fasciae or spots covering more than half of total surface 13
– Elytron with narrow fasciae or spots covering less than third of total surface 14
13 Margins of anterior elytral fascia strongly dentate. Pronotal punctures fine, smaller than intervals ..... *biundulatum* Champion
– Margins of anterior elytral spot weakly dentate. Pronotal punctures fairly coarse, as large as or larger than intervals ..... *arrowi* Achard
14 Apical half of male protibia evenly thick ..... *nepalense* sp.n.
– Inner margin of male protibia angulate in apical half, tibia narrowed towards apex ..... *gurung* sp.n.
15 Elytron with anterior fascia strongly narrowed in middle, posterior fascia not reaching apical margin ..... *harmandi* Achard
– Elytron with anterior fascia almost evenly wide, posterior fascia extended to apical margin ..... *coomani* (Pic)
16 Elytron yellowish, with base, sutural, lateral and apical margins black *rubritarse* Pic
– Elytron ochreous, with black or brown spots and/or fasciae 17
17 Elytral disc entirely very finely punctate ..... *semilimbatum* Pic
– Elytral disc with rows of coarse punctures 18
18 Elytral disc with two long and two short rows of coarse punctures ..... *baconi* Pic
– Elytral disc with one long and one short row of coarse punctures 19
19 Pronotal spots not reaching basal margin. Elytron with wide central and apical fasciae, and with small humeral spot ..... *septemnotatum* Champion
– Pronotal spots reaching basal margin. Elytron with humeral spot absent ..... species indet.

Scaphidium cinnamomeum Champion

Scaphidium cinnamomeum Champion, 1927: 270.

D i a g n o s i s . Length 3.2 - 3.4 mm. Head and body ochreous. Femora and antennomeres I to VI as body, tibiae darker, antennomeres VII - XI dark brown to blackish. Frons narrow. Pronotum strongly vaulted above level of elytra and strongly inclined apically, sub-basal row of punctures broadly interrupted in middle, lateral margins distinctly sinuate, discal punctation very fine. Elytron vaulted, with impressed sutural area; discal punctation fine with exception of two longitudinal rows of coarse punctures and several additional coarse punctures situated laterally. Male profemur incurved, ventrally flattened, with anterior and posterior ventral edge distinct, basal half bearing ventral row of erected setae; subapical tubercle minute. Meso- and metafemur slender in both sexes.

Male protibia slender, somewhat incurved and weakly thickened apically, meso- and metatibia distinctly incurved and thickened apically. Aedeagus (Figs 45,63) with median lobe weakly narrowed apically in dorsal view, ventral wall suddenly tapering apically. Parameres each sinuate in apical half, with rather strongly enlarged apex. Internal sac complex (Fig.83).

Type material. Holotype, female, labelled "W. Almora Divn. Kumaon U.P. nov. 1918, H.G.C." (BMNH).

Materia examined, 5 specimens: India, Himachal Pradesh, 10 km NW Sarahan, 1700 m, 7.X.1988 (Vit) (MHNG).

Distribution. North India, Uttar Pradesh: Kumaon and Himachal Pradesh.

Remarks. This species was found under oak bark, on stump with fungi, and in decaying plant debris.

Scaphidium melanogaster sp.n.

Holotype, male: India, Himachal Pradesh, Kulu Valley, Vashisht Baths N Manali,1990m, 13.X.1988 (Vit) (MHNG).

Paratypes, 4: India, Himachal Pradesh, 10km NW Sarahan, 7.X.1988 (Vit) (MHNG) 2 females; Uttar Prades, Mussoorie, Rabit Farm, 1300 m, 10.VII.1989 (Riedel) (SMNS) 1 female; Nepal, Sankhua Sabha distr., above Sheduwa, 2550 m, 30.III.1982 (A. & Z.Smetana) (MHNG) 1 female.

Diagnosis. Small-sized species with ochreous dorsal surface and black ventral side of thorax. Elytral punctation very fine. Male profemur and protibia without conspicuous sexual characters.

Description. Length 3.3 mm. Head, pronotum, hypomera, elytra, and abdomen uniformly ochreous. Ventral surface of thorax, hypomera excepted, femora, tibiae, and antennal club black. Tarsi dark reddish-brown, antennal segments I to VI ochreous. Frons rather narrow. Pronotum vaulted above level of elytra, rather strongly inclined anteriad, with lateral margins distinctly sinuate; sub-basal row of punctures interrupted in middle, punctures relatively small, joined by striae; discal punctation almost obsolete. Elytron vaulted, with sutural area flat and impressed; punctures along sutural stria relatively small, about as large as basal punctures; discal punctation very fine, somewhat more distinct than that of pronotum; in addition, disc with two longitudinal rows of coarse punctures; apical area of disc weakly flattened, with enlarged but extremely shallow punctures. Pygidium and propygidium evenly very finely punctate, both bearing microsculpture well visible at 50x magnification. Male with metasternal pubescence short and sparse. Profemur weakly thickened, without conspicuous sexual characters. Meso- and metafemur slender. Protibia somewhat incurved, hardly stouter apically. Meso- and metatibia distinctly incurved, slender. Aedeagus with median lobe similar to that of *S. cinnamomeum*, but with lateral margins of distal portion somewhat concave. Parameres (Fig. 66) each gradually wider toward middle third, from there narrowed, in apical portion again wider; inner margin of parameres concave between middle and apical portion. Internal sac complex (Fig. 82).

Remarks. This species is similar to *S. cinnamomeum* with which it shares the interrupted sub-basal row of pronotal punctures and the reduced metasternal pubescence in male. It may be readily distinguished by the black ventral surface of the thorax and by the black femora and tibiae. Besides, it differs from *S. cinnamomeum* by the less vaulted pronotum, by the elytral and abdominal punctation (the pygidium and propygidium are notably more coarsely punctate in *S. cinnamomeum*), and by the sexual characters in male. The holotype was found in decaying plant debris, the two paratypes were taken together with *S. cinnamomeum* from under oak bark.

Scaphidium grande Gestro

Scaphidium grande Gestro, 1879: 50; Achard 1920a:56; 1920b:125; 1920c:211; Champion 1927:268; Löbl 1990b:511.
Scaphidium grande var. *subannulatum* Pic, 1915c:3. - syn.nov.
Scaphidium grande var. *inimpressum* Pic, 1920:189. - syn.nov.
Scaphidiolum grande; Achard 1924b:91.

Diagnostic characters. Length 6 - 7 mm. Head and body black. Profemur and all tibiae black. Meso- and metafemur black, each with wide reddish fascia. Tarsus and antennomeres I to VI dark brown to blackish, club black. Frons moderately wide. Pronotum vaulted, with centre above level of elytra, discal punctation very dense. Elytron rather flat, with raised sutural area, without row of coarse punctures, discal punctation irregular, more or less fine. Male with ventral side of profemur and inner side of protibia tuberculate. All femora slender. Protibia weakly incurved, almost evenly stout, with minute apical denticle. Meso- and metatibia somewhat incurved. Metasternal pubescence dense and long. Aedeagus (Fig. 39) with median lobe wide, parameres (Fig. 55) weakly enlarged and incurved apically, internal sac comlex (Fig.71).

Type material. Holotype male, from "Sarawak" (MCSN), examined.

Material examined, 6 specimens: Nepal, Sankhua Sabha distr., bottom Arun Valley bellow Num, 1050 m, 21. and 22.IV.1984 (Löbl & Smetana) (MHNG).

Distribution. North India, Nepal, Burma, Thailand, Laos, Malaysia, Vietnam, Indonesia, Taiwan.

This is a rather variable species, especially in size and elytral punctation. The Himalayan specimens are smaller than those I have seen from southeast Asia. The infrasubspecific forms *inimpressum* Pic, 1920 and *subannulatum* Pic, 1915 are based on characters without taxonomic significance.

The specimens from Eastern Nepal were found under wood debris in a subtropical forest.

Scaphidium cyanellum Oberthür

Scaphidium cyanellum Oberthür, 1884: 5; Champion 1927: 271.

Diagnostic characters. Length 3.4 - 3.8 mm. Head dorsally, pronotum and elytra very dark violet or bluish, with metallic shine. Remaining surface of body, femora, tibiae, and antennal club black. Antennomeres I to VI and tarsi reddish-brown to black. Frons rather narrow. Pronotum vaulted above level of elytra, moderately inclined anteriad, with distinctly sinuate lateral margins; discal punctation dense and rather coarse, sub-basal row of coarse punctures not interrupted. Elytron vaulted, with irregular discal punctation and without trace of discal rows of coarse punctures, large discal punctures usually smaller than large punctures of pronotal disc; sutural area raised. Pygidium and propygidium finely punctate, both with more or less distinct microsculpture. Male with long oblique metasternal pubescence; profemur thickened, ventral side flattened, anterior margin subangulate ventrally. Metafemur somewhat stouter than mesofemur. Male protibia straight beyond weakly incurved basal portion, gradually stouter toward shallow subapical notch, then narrowed and with oblique inner margin. Meso- and metatibia straight or hardly arcuate, gradually thickened apically. Aedeagus (Fig. 42) with apical portion of median lobe evenly wide in dorsal view, in ventral view tapering toward apex. Parameres each somewhat incurved apically. Internal sac complex (Fig. 74).

Type material. Holotype, female, from "Ind.bor."(MNHN), examined.

Material examined, 9 specimens: Nepal, Parbat distr.,Kali Gandaki Khola, Kopchepani, 1600 m, 18.VI.1986 (Holzschuh) (MHNG) 1; Kopchepani-Ghasa, 1600-2000 m, 19.VI.1986 (Probst) (MHNG) 1; Patan distr., Godawari, 1500 m, 22-25.VI.1983 (Brancucci) (NMB) 1; Godawari, 1500-1600 m, 6.VII.1986 (Holzschuh) (MHNG) 1; Sankhua Sabha distr., Arun Valley, Chichila-Mure, 1900 m, 24.V.1980 (Holzschuh) (MHNG) 1; Chichila, 1950 m, 29.V.1983 (Brancucci) (NMB) 1; Arun Valley, Num, 1550 m, 5-6.VI.1983 (Brancucci) (NMB) 1; Thernathum distr., Phulvari-Waku, 1200-1600 m, 9.VI.1985 (Brancucci) (NMB,MHNG) 2.

Distribution: India "North India", Meghalaya, Nepal.

Scaphidium biseriatum Champion

Scaphidium biseriatum CHAMPION, 1927: 268.

Diagnostic characters. Length 3.8 - 4.5 mm. Body, femora and tibiae black or blackish-brown, apex of abdomen paler. Antennomeres I to VI and tarsi reddish, antennal club brown. Frons narrow. Pronotum vaulted above level of elytra, strongly inclined apically, with lateral margins sinuate; discal punctation rather fine, sub-basal row of punctures not interrupted at middle. Elytron moderately convex, with 2 or 3 rows of coarse punctures in addition to irregular, fine discal punctation; sutural area impressed. Male with long oblique metasternal pubescence. Male profemur moderately thickened, margined and with one row of tubercles ventrally. Metafemur barely thickened. Male protibia somewhat incurved, becoming stouter from base to middle, evenly thick in apical half, with small apical tooth on ventral side. Meso- and metatibia somewhat arcuate. Aedeagus (Fig. 51) with median lobe wide dorsally, ventral side tapering. Parameres (Fig. 58) each incurved, somewhat enlarged at apex. Internal sac complex (Fig.76).

Type material. Holotype male from "Sunderdhung V., W.Almora divn., 8-1200 feet" (BMNH), examined.

Material examined, 23 specimens: Nepal, Sankhua Sabha distr., Arun Valley, Lamobagar Gola, 1000-1400 m, 27.V.-2.VI.1980 (Holzschuh) (NMB) 1; bottom Arun Valley below Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG) 19; Taplejung distr., confluence of Kabeli Khola and Tada Khola, 1000 m, 23-25.IV.1988 (Martens & Schawaller) (SMNS) 1; India, Uttar Pradesh, Garhwal, Gangani, 1250 m,13-20.VI.1981 (Brancucci) (NMB) 1; West Bengal, Darjeeling distr., Tindharia near Kurseong, 7.V.1980 (Hisamatsu) (MHNG) 1.

Distribution. North India, Nepal.

Scaphidium dureli (Achard) comb. n.

Scaphidiolum dureli ACHARD, 1922c:37.

Diagnostic characters. Length 6 mm. Head, pronotum and most of ventral surface black. Elytra and hypomera blackish, with weak reddish shine. Femora and tibiae black, tarsi dark reddish brown.Antennomeres I to VI dark reddish brown, VII to X black, XI ochreous. Eyes large. Frons moderately wide. Pronotum moderately vaulted above level of elytra, strongly inclined apically, with distinctly sinuate lateral margins, sub-basal row of punctures regular, not interrupted in middle, consisting of coarse punctures, discal punctation fine and dense. Elytron without any discal row of coarse punctures; punctation obsolete on humeral area, on most surface similar to that of pronotum. Femora slender, in male without particular sexual chgaracters. Male protibia strongly arcuate, slender except for moderately thickened apex. Mesotibia in male weakly arcuate, metatibia almost straight. Aedeagus with wide median lobe gradually narrowed toward tip. Apical portion of parameres weakly widened. Internal sac complex.

T y p e m a t e r i a l . One male syntype from "British Bootan Padong L.Durel 1913" (MHNG), examined. An additional male bearing same locatity data but not Achard's identification label (MNHN) is possibly a syntype also.

R e m a r k s . I have not been able to locate the type data. The species may be readily distinguished from *S. grande* by the uniformly flack femora and by the shape of the male profemur and protibia.

Scaphidium thakali sp.n.

Holotype, male: Nepal, Mustang distr., Lete, 2550 m, 2.X.1983 (Löbl & Smetana) (MHNG).

Paratypes, 4: Nepal, Mustang distr., Lete, 24.IX.1971 (Franz) (Coll.H.Franz, MHNG) 2 females; Myagdi distr., Gasa-Tatopani, Kali Gandaki Valley, 2000-2500 m, 20.VI.1986 (Holzschuh) (NMB) 1 female; Chitre, Ghar Khola, 2400 m, 26-31.V.1984 (Holzschuh) (MHNG) 1 male.

D i a g n o s i s . Medium-sized species with unicolored black body. Elytral punctation irregular. Male profemur with anterior margin keeled, male protibia thickened in apical half and notched near apex.

D e s c r i p t i o n . Length 4.5 mm. Body black, head and legs very dark reddish-brown. Antennomeres I to VI ochreous, VII to X black, XI dark brown. Pronotum vaulted above level of elytra, strongly inclined apically, with lateral margins oblique in basal half (dorsal view), discal punctation dense and rather coarse, sub-basal row of coarse punctures deeply impressed, not interrupted at middle. Elytron with moderately and evenly rounded lateral margin, dorsally moderately convex; area between sutural margin and deeply impressed sutural stria distinctly raised; basal punctures not elongate, becoming gradually larger laterad; discal punctation irregular, without any longitudinal row of coarse punctures, most punctures much finer than those on pronotum; apical portion of elytron somewhat flattened and with punctation coarser than that on centre. Propygidium and pygidium very finely punctate, with microsculpture distinct on propygidium and on base of pygidium, obsolete on most of pygidium. Male with metasternal pubescence long, dense, erected. Profemur thickened, with anterior margin expanded, forming small rounded keel. Metafemur somewhat stouter than mesofemur. Basal half of protibia incurved, apical half thickened and with straight outer margin, subapical notch shallow. Ventral margin of protibia weakly convex above and straight below notch. Meso- and metatibiae almost straight, barely sinuate in dorsal view. Aedeagus (Fig.52) weakly expanded apically, with ventral wall abruptly narrowed. Parameres (Fig. 61) each sinuate, narrowed subapically. Internal sac complex (Fig. 78).

R e m a r k s . *Scaphidium thakali* exhibits secondary sexual characters very similar to those in *S. harmandi*, except for the slender protibia. However, these two species may be readily distinguished by their distinct colour patter. *S. harmandi* differs also in the higher vaulted pronotum and in the shape of the aedeagus.

Scaphidium sylhetense Achard

Scaphidium sylhetense ACHARD, 1920e: 263; Champion 1927:269.

D i a g n o s t i c c h a r a c t e r s . Length 4.0 - 4.6 mm. Head dark reddish-brown to blackish. Thorax and most of elytra black, lateral area of pronotum sometimes reddish. Elytron with reddish sub-basal fascia (Fig.15). Abdomen reddish or ochreous with dark pygidium and dark genital segments. Femora and tibiae black, tarsi dark brown. Antennomeres I to VI dark brown or reddish, club black. Frons narrow. Pronotum vaulted

above level of elytra, strongly inclined apically, with notably sinuate lateral margins; sub-basal row not interrupted, discal punctation rather coarse. Elytron moderately convex, with discal punctation similar to that of pronotum, except for very finely punctate base and sub-basal fascia; disc without any row of coarse punctures. Metasternal pubescence in male long, dense, decumbent. Male profemur thickened, flattened ventrally, margined along anterior edge, beyond narrowed and with concave margin beyond small subapical tooth. Metafemur hardly thickened. Male protibia weakly incurved, very weakly thickened apically, with row of more or less distinct tubercles on inner side. Meso- and metatibiae somewhat incurved. Aedeagus (Fig. 53) with apical portion of median lobe slender. Parameres (Fig. 59) evenly arcuate, not enlarged apically. Internal sac with small sclerites (Fig.79).

T y p e m a t e r i a l . The male lectotype from Sylhet (BMNH) was designated by Champion (1927), not examined.

M a t e r i a l e x a m i n e d (males only), 13 specimens: India, West Bengal, Darjeeling distr., Trindharia near Kurseong, 7.V.1980 (Hisamatsu) (MHNG) 1; Sukuna near Matigara, 7.V.1980 (Hisamatsu) (MHNG) 1; Nepal, Sankhua Sabha distr., bottom Arun Valley below Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG) 1; Hedangna - Num, 800 m, 16.VI.1983 (Brancucci) (NMB, MHNG) 3; Arun Valley, Lamobagar Gola, 1000-1400 m, 25.V.-3.VI.1980 (Holzschuh) (MHNG) 5; same but 1400 m, 8-14.VI.1983 (Brancucci) (NMB) 1; Myandi distr., Tatopani, 1100-1400 m, 27-28.VI.1986 (Holzschuh) (MHNG) 1.

D i s t r i b u t i o n . Bangla Desh, North India, Nepal.

R e m a r k s . Champion (1927) noted that the "anterior femora are toothed beyond the middle beneath". This, in combination with characters given by Achard, does define the species. For further details see remarks under *S. holzschuhi*. The specimens from eastern Nepal were found on and under logs and wood debris; some were swept from vegetation.

Scaphidium holzschuhi sp. n.

Holotype, male: Nepal, Sankhua Sabha distr. Arun Valley, Lamobagar, 1400 m, 8-14.VI.1983 (Holzschuh) (MHNG).

Paratypes, 4 males: Sankhua Sabha distr., Arun Valley, Hedangna - Num, 800 m, 16.VI.1983 (Brancucci) (NMB,MHNG) 2; Hedangna - Navagaon, 5.IV.1980 (Holzschuh) (MHNG) 1; bottom Arun Valley bellow Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG) 1.

D i a g n o s i s . Medium-sized species with distinct colour pattern. Elytral punctation fine or very fine. Male profemur with minute tubercles. Inner margin of male protibia strongly sinuate.

D e s c r i p t i o n . Length 4.0 - 4.5 mm. Head dark reddish-brown. Thorax black except for small reddish sub-basal area on each side of pronotum. Elytron black with ochreous sub-basal fascia. Abdomen ochreous with dark pygidium and dark genital segments. Legs dark brown. Antennomeres I to VI ochreous, club black. Frons narrow. Pronotum weakly vaulted above level of elytra, strongly inclined apically, with distinctly sinuate lateral margins; discal punctation dense, rather fine, basal punctation very fine, sub-basal row not interrupted at middle. Elytron moderately convex, very finely punctate on base and on ochreous fascia, beyond latter more or less finely punctate; punctures along sutural stria coarser than largest discal punctures; basal punctures not elongate; interval between sutural margin and sutural stria raised. Pygidium and propygidium very finely punctured and microsculptured. Male with metasternal pubescence long, dense, oblique. Profemur distinctly thickened, flattened ventrally, with anterior ventral margin irregular, bearing several minute tubercles. Metafemur only somewhat thicker than mesofemur.

Protibia incurved in basal third, with outer margin somewhat, inner margin strongly sinuate (lateral view); stouter towards apical third, from there narrowed toward apex, at apex only somewhat thicker than at base. Meso- and metatibia very weakly arcuate, gradually weakly thickened apically. Aedeagus (Fig. 54) with narrow apical portion of median lobe. Parameres and internal sac (Fig. 78) very similar to those in *S. sylhetense*.

Remarks. This species may be distinguished from *S. sylhetense* by the shape of the male profemur and protibia. The pronotal punctation seems to be somewhat finer in *S. holzschuhi* than in *S. sylhetense*, but it does not provide reliable distinguishing character. Consequently, only males may be positively identified.

Scaphidium biundulatum Champion

Scaphidium biundulatum CHAMPION, 1927:269.

Diagnostic characters. Length 5.5 - 6.0 mm. Head, body including apex of abdomen, antennae and legs black. Elytron with two large ochreous fasciae (Fig. 10). Frons wide. Pronotum not vaulted above level of elytra, moderately inclined apically, with fine discal punctation; sub-basal row not interrupted at middle. Elytron with fine discal punctation, without any row of coarse punctures, impunctate on pale fasciae. Male profemur thickened, its central portion explanate anteriorly; metafemur thickened. Male protibia incurved in basal half, straight in apical half, gradually stouter from basal fifth toward apical third, then narrowed toward apex; inner margin angulate, inner surface glabrous apically. Meso- and metatibia arcuate. Tarsi somewhat longer in male than in female. Aedeagus (Fig.48) with wide median lobe. Parameres not enlarged apically. Internal sac complex (Fig. 68).

Type material. Holotype, male from Tonglu (Darjeeling district near Nepal frontier), BMNH, examined.

Material examined, 10 specimens: Nepal, Panchtar distr., Dhorpar Kharka, 2700 m, *Rdododendron-Lithocarpus* forest, 13-16.IV.1986 (Martens & Schawaller) (SMNS,MHNG) 3; Taplejung distr., ascent to pasture Lassetham from Omje Khola, 2400-3150 m, 6.V.1988 (Martens & Schawaller) (SMNS,MHNG) 2; Sankhua Sabha distr., above Pahakhola, 2600-2800 m, *Quercus semecarpifolia-Rhododendron*, 31.V.-3.VI.1988 (Martens & Schawaller) (SMNS, MHNG) 3; India, Sikkim, Bakkim-Choka, 2670-3050 m, nr. Yuksam, 25.IX.1983 (Sakai) (M.Sakai, MHNG) 2.

Distribution. Eastern Nepal, western Darjeeling distr. and western Sikkim.

Remarks. CHAMPION (1927) stated that *S. biundulatum* resembles closely to *S. fryi* Achard. I have examined one syntype of the latter species. It is notably smaller and has the colour pattern of the elytra significantly different (Fig. 11) from that in *S. biundulatum*.

Scaphidium arrowi Achard

Scaphidium arrowi ACHARD, 1920e: 264.

Diagnostic characters. Length 7 mm. Head, body, legs and antennae black. Each elytron with two ochreous spots. Anterior spot large, extending from sutural stria to lateral stria and from basal row of punctures upto mid-length of elytron, with deeply emargined apical margin in male, somewhat irregular, oblique apical margin in female. Apical spot smaller, wider than long, suboval, separated from sutural stria and from apical elytral margin by narrow dark area. Frons wide. Eyes relatively small. Pronotum not vaulted above level of elytra, strongly inclined apically, with strongly

sinuate lateral margins; sub-basal row of punctures not interrupted in middle; discal punctation dense and coarse, most punctures about as large as or larger than intervals. Elytron without any discal row of coarse punctures; spots impunctate, black areas inbetween densely and coarsely punctate, punctures larger than those of pronotum and about as large as intervals. Metasternal pubescence in male short, decumbent. Male femora not thickened, longer than those in female. Profemur flattened and margined ventrally, with ventral margin sinuate in frontal view. Male protibia thickened toward apical seventh, then narrowed, with inner margin oblique, not notched; basal half of protibia weakly curved, apical half straight. Mesotibia longer than in female, arcuate. Mesotarsus conspicuously long, with ventral pubescence long. Aedeagus with median lobe wide, parameres evenly slender, setose, bearing minute tubercles on apical portion of inner side, and with internal sac complex.

Type material. Lectotype, female, labelled "Bhotan Padong" (NMP), two paralectotypes, females, labelled "British Bootan Padong L.Durel 1913" (NMP,MHNG), and one male paralectotype labelled "Assam" (BMNH), by present designation.

Remarks. This species shares many characters with *S. quadrimaculatum* and its allies but exhibits setose and apically tuberculate parameres. The male paralectotype is in poor state. It has been pinned and its hind legs are missing.

Scaphidium gurung sp. n.

Holotype, male: Nepal, Parbat distr., Ghoropani pass, 2700 m, S slope, 9.X.1983 (Löbl & Smetana) (MHNG).

Paratypes, 8: as holotype but 6.X., 2 males; nr. Ghoropani pass, 2700-3100 m, 5-9.X.1983 (Löbl & Smetana) (MHNG) 1 female; Bhantanti-Ghoropani, 2500-2800 m, 10.V.1984 (Holzschuh) (MHNG) 1 male, 2 females; Chitre, 2400 m, 26-31.V.1984 (Holzschuh) (MHNG) 1 male; Mustang distr., Kopchepani, 1500-1700 m, 15.V.1984 (Bhakta) (NMB) 1 female.

Diagnosis. Large species with black body and distinct colour pattern of elytra, latter finely punctate. Male profemur thickened, margined anteriorly. Male protibia with angulate inner margin.

Description. Length 5.0 - 5.5 mm. Head, body, antennae and legs black. Elytron with narrow whitish or yellowish sub-basal fascia and with two subapical spots of same colour (Fig. 14), spots sometimes joined. Frons wide. Pronotum similar to that of S.biundulatum, discal punctation fine, basal punctation very fine, sub-basal row not interrupted at middle. Elytron with fine discal punctures similar to those of pronotum, without any row of coarse discal punctures, with humeral area very finely punctate, basal punctures not elongate; pale spots and fasciae impunctate. Pygidium and propygidium very finely punctate, distinctly microsculptured. Male with metasternal pubescence long and dense. Profemur thickened, ventrally flattened, margined anteriorly. Metafemur moderately thickened, widest beyond middle. Protibia incurved, evenly thin in basal fourth, then gradually stouter, from widest point toward apex obliquelly narrowed, with angulate inner margin. Meso- and metatibiae incurved. Aedeagus (Fig.49) with short, wide, apically narrowed distal portion. Parameres (Fig.56) each incurved, not enlarged apically. Internal sac complex (Fig.70).

Remarks. This species may be readily distinguished from *S. biundulatum* by the smaller size and by the colour pattern.

Scaphidium nepalense sp. n.

Holotype, male: Nepal, Patan distr., Phulcoki, 2550 m, 29.IV.1984 (Löbl & Smetana) (MHNG).

Paratypes, 75: as holotype, 6 males, 13 females; same but 2500m, 30.IV., 5 males, 1 female; same but 2600 m, 13.X.1983, 1 male; Phulcoki, 20. and 22.IV.1982 (A. & Z. Smetana) (CNC, MHNG) 1 male, 4 females; Kathmandu distr., Siwapuri, 24.III.1982 (Rougemont) (MHNG) 2 males, 1 female; Siwapuri, 2500 and 2540 m, 8.X.1981 (Sakai) (Coll. Sakai) 2 females; Siwapuri, 2400-2500 m, 29.IV.-1.V.1985 (Smetana) (MHNG, CNC) 25 specimens; Sindhupalcok distr., Gul Bhanjyang, 2600 m, 6.IV.1981 (Löbl & Smetana) (MHNG) 3 males, 3 females; Kutumsang, 2200-2400 m, 6.IV.1981 (Löbl & Smetana) (MHNG) 1 male; Malemchi, 2800 m, 14-18.IV.1981 (Löbl & Smetana) (MHNG) 2 males, 3 females.

D i a g n o s i s . Large species with black body and distinct colour pattern of elytra. Elytra finely and irregularly punctate. Male profemur ventrally flattened, margined anteriorly. Apical half of male protibia evenly wide.

D e s c r i p t i o n . Length 4.5 - 5.0 mm. Very similar to *S. gurung*, body in average smaller, elytron (Fig.13) with yellowish colour pattern. Punctation on pronotal disc notably coarser than that in *S. gurung*. Elytral punctation usually finer than that of pronotum, punctures along sutural stria about as coarse as discal punctures; outer basal punctures somewhat elongate. Male with metasternal pubescence long and dense. Profemur moderately thickened, ventrally flattened and glabrous, margined anteriorly. Metafemur weakly thickened beyond middle. Protibia somewhat incurved near base, in apical half weakly and evenly thickened. Meso- and metatibia moderately incurved. Aedeagus (Fig.50) with ventral wall of median lobe gradually tapering toward apex, parameres (Fig.57) each arcuate, apically moderately enlarged, internal sac complex (Fig.69).

R e m a r k s . This species differs notably from *S. gurung* and *S. biundulatum* in the shape of the male protibia. The females of *S. nepalense* may be distinguished by the yellowish elytral pattern. These three species are possibly vicarious. Most specimens were found in decaying vegetational debris along large oak logs and under oak bark, on logs with fungi.

Scaphidium harmandi Achard

Scaphidium harmandi ACHARD, 1920f: 125.

D i a g n o s t i c c h a r a c t e r s . Length 4.5 - 5.0 mm. Head reddish. Pronotal coloration variable, generally most of surface black and lateral margin with reddish spot or fascia, sometimes median area reddish. Elytron black, with two reddish transverse fasciae (Fig.16). Abdomen black, apical segments sometimes more or less reddish. Legs blackish or dark reddish-brown, antennomeres I to VI ochreous, antennal club black. Pronotal disc not vaulted above level of elytra, with lateral margins not sinuate, oblique near base, discal punctation coarse, sub-basal row of punctures not interrupted. Elytron moderately convex, discal punctation fine, rather irregular, without row of coarser punctures; sutural area flat, not impressed. Male metasternum with long dense pubescence. Male profemur widened, with keeled middle of anterior margin. Meso- and metafemur slender. Male protibia with incurved basal third, then with straight outer margin, sinuate inner margin; tibia thickened beyond middle, with apical fourth slenderer than middle, but stouter than base, with small glabrous area near apical margin. Aedeagus (Fig.40) with median lobe narrowed beyond level of ventral process, moderately enlarged apically. Parameres each incurved, narrowed subapically. Internal sac complex (Fig.72).

Type material. Lectotype female, labelled "Sikkim Harmand 1886" (MNHN), by present designation.

Material examined, 13 specimens. Nepal, Myandi distr., Kopchepani, 1600 m, 18.VI.1986 (Holzschuh) (MHNG) 1; Kathmandu distr., Siwapuri, 1700-2100 m, 25.VI.1988 (Martens & Schawaller) (MHNG) 1; Sankhua Sabha distr., Chichila, 2200 m, 24.IV.1984 (Löbl & Smetana) (MHNG) 3; forest NE Kuwapani, 2250 m, 24.IV.1984 (Smetana & Löbl) (MHNG) 1; same but 2600 m, 15.IV.1982 (A. & Z.Smetana) (MHNG) 1; Induwa Khola Valley, 2100 m, 17.IV.1984 (Löbl & Smetana) (MHNG) 1; Basantapur, 2100, 30.V.-2.VI.1985 (Brancucci) (NMB) 1; Taplejung distr., Yamputhin cultural land, 1650-1800 m, 26.IV.-1.V.1988 (Martens & Schawaller) (SMNS, MHNG) 3; between Hellok and lower Gunsa Khola, 2000-1620 m, 18.V.1988 (Martens & Schawaller) (SMNS) 1.

Distribution. Nepal, Sikkim (or Darjeeling district).

Remarks. *Scaphidium sinense* Pic has similar colour pattern (Fig.17) as *S. harmandi*.

Scaphidium semilimbatum Pic

Scaphidium semilimbatum Pic, 1917: 3.

Diagnostic characters. Length 4.5 mm. Head reddish-brown. Pronotum reddish-brown with black base and two small black median spots; hypomeron reddish except for narrow black area near procoxal cavity. Most of elytron ochreous; basal, lateral and apical margins black, humerus black, disc with black transverse fascia (Fig.18). Most of ventral surface reddish, mesepimeron, mesepisternum and centre of metasternum black, mediobasal portion of 1st abdominal ventrite and metasternum darkened. Pygidium and propygidium reddish, base of pygidium black. Legs dark reddish. Antennomeres I to VI reddish, club black. Frons rather wide. Pronotum vaulted above level of elytra, with moderately sinuate lateral margins. Elytron convex, with rather fine punctation similar to that of pronotum, without discal row of coarser punctures. Male profemur stout, with keeled anterior margin in basal half. Male protibia moderately arcuate in basal half, with apical half of outer margin straight, inner margin sinuate between basal third and apex, and with shallow subapical notch. Meso- and metatibia each long, former weakly incurved, latter straight. Aedeagus with apical portion of median lobe enlarged near tip. Parameres each sinuate, almost equally wide in apical half. Internal sac complex.

Type material. Lectotype, male, labelled "Kurseong (R.P.Astruc)"(MNHN), by present designation.

Material examined, 1 specimen: Nepal, Sankhua Sabha distr., bottom Arun Vallew below Num, 1050 m, 21.IV.1984 (Löbl & Smetana) (MHNG).

Distribution. East Nepal and India, West Bengal: Darjeeling district.

Remarks. Kurseong is a village in the Darjeeling district quoted erronously by Pic (1917) as a Chinese locality. The single specimen of *S. semilimbatum* kept in the MNHN bears Pic's handwritten identification label. There is no doubt that this is the specimen he had described.

Scaphidium coomani (Pic), comb. n.

Scaphidiolum coomani Pic, 1925:323.

Diagnostic characters. Length 3.5 - 3.7 mm. Head with frons reddish or ochreous and vertex black. Body black, pronotum with two large lateral ochreous spots extended over upper portion of hypomera. Elytron with large sub-basal and narrower

apical ochreous fasciae (Fig.20). Apex of abdomen blackish or dark brown. Femora black, tibiae dark brown to blackish, tarsi and antennomeres I to VI reddish-brown, VII to X and basal half of XI black, apical half of segment XI paler. Frons very narrow. Pronotum notably vaulted above level of elytra, with sinuate lateral margins and very fine discal punctation. Elytra convex, with fine discal punctation, without discal row of coarser punctures. Male profemur and protibia without conspicuous features. Male meso- and metatibia longer than in female, protarsus enlarged. Aedeagus (Fig.43) with median lobe gradually narrowed apically. Parameres (Fig.64) each distinctly incurved, enlarged apically. Internal sac complex (Fig.75).

Type material. Lectotype, female, labelled "LACTHO Tonkin de Cooman" (MNHN), by present designation.

Material examined, 6 specimens: Nepal, Sankhua Sabha distr., Arun Valley, Lamobagar Gola, 1000-1400 m, 27.V.-3.VI.1980 (Holzschuh) (MHNG, NMB) 4; India, Meghalaya, Garo Hills, 2500 ft. VII.-VIII.1917 (Kemp) (MHNG,ZSI) 2.

Distribution. Vietnam, North India, Nepal.

Scaphidium baconi Pic

Scaphidium baconi Pic, 1915c: 43.
Scaphidium assamense Pic, 1915c: 43.
Scaphidium baconi; Achard, 1922d: 263; Löbl, 1990b: 511.

Diagnostic characters. Length 4.5 - 5.2 mm. Head ochreous. Pronotum yellowish or ochreous, with two black discal spots and two small, more or less darkened subapical spots. Elytron yellowish or ochreous, with five black spots: larger humeral, latero-central and apical, and two smaller near sutural stria (Fig.23); sutural area, epipleuron and pseudopleron black. Abdomen yellowish, pygidium sometimes with more or less dark spot. Upper portion of hypomeron yellowish, lower portion black. Ventral surface of thorax black except for yellowish lateral portion of metasternum. Femora yellowish with black base, profemur with black spot on ventral side. Tibiae and tarsi dark reddish-brown. Antennal segments I to VI reddish-brown, club black. Frons narrow. Pronotum somewhat vaulted above level of elytra, strongly inclined apically, with hardly sinuate lateral margins and very fine discal punctation. Elytral disc rather flat, with two long and two short rows of coarse punctures; discal punctation fine near base, gradually coarser from middle toward apex. Male profemur weakly thickened, its anterior ventral edge margined and bearing a row of minute tubercles, and with few minute subapical tubercles along posterior ventral edge. Male protibia slender, sinuate, weakly thickened apically. Meso- and metatibia arcuate, evenly slender. Aedeagus (Fig.47) with median lobe abruptly narrowed subapically. Parameres each incurved. Internal sac complex (Fig.81).

Type material. Lectotype of *S. baconi*, female, labelled "Ind.bor. Bacon" (MNHN), by present designation; lectotype of *S. assamense*, female, labelled "Margherita Assam IV & V.1889" (MNHN), by present designation.

Material examined, 3 specimens: Nepal, Sankhua Sabha distr., Arun Valley, Mure, 2000-1300 m, 9.VI.1983 (Brancucci) (NMB) 1; Taplejung distr., SE Yamputhin to Yamputhin, 2000-1650 m, and Yamputhin cultural land, 1650 - 1800 m, 26.IV. - 1.V.1988 (Martens & Schawaller) (SMNS,MHNG) 2.

Distribution. Vietnam, India, Nepal.

Scaphidium rubritarse Pic

Scaphidium rubritarse Pic, 1915b: 36.

Diagnostic characters. Length 4.5 mm. Head, most of pronotum, hypomera, and abdomen ochreous. Basal portion of pronotum and scutellum black. Elytron yellowish, with black base between suture and humerus, black lateral and apical margins, and black epipleuron and pseudopleuron (Fig.19). Ventral surface of thorax, femora, tibiae and antennal club black. Tarsi dark brown, antennomeres I to VI ochreous. Frons rather wide. Pronotum vaulted above level of elytra, strongly inclined apically, with lateral margins oblique near base, arcuate in apical half (dorsal view); discal punctation very fine, sub-basal row not interrupted at middle. Elytron weakly vaulted, with flat sutural area and very fine punctation, latter obsolete on yellowish surface of disc. Male profemur thickened, ventrally flattened, with convexly arcuate ventral margin. Meso- and metafemur slender. Protibia in basal half moderately incurved, stouter toward apex, with shallow subapical notch; inner margin concave between base and apical third, weakly oblique in apical third. Meso- and metatibia moderately incurved. Aedeagus (Fig.41) with apical portion of median lobe almost evenly wide, apical margin of ventral wall broadly rounded. Parameres incurved (Fig.62), evenly wide. Internal sac complex (Fig.73).

Type material. Not located. According to the description from Java. Possibly lost from the Pic's collection which is housed in the MNHN.

Material examined, 1 specimen: Nepal, Panchtar distr., betw. Gitang Khola Valley and Dhopar Kharka, cultural land, mixed forest, 1750-2100 m, 13.IV.1988 (Martens & Schawaller) (MHNG).

Distribution. Java, Nepal.

Remarks. The identity of the Nepalese specimen is based on its conspicuous colour pattern which corresponds with the description. The type material of *S. rubritarse* has not been traced in the MNHN.

Scaphidium septemnotatum Champion

Scaphidium septemnotatum Champion, 1927: 270.

Diagnostic characters. Length 3.0 - 3.3 mm. Head and body ochreous, pronotum with two black spots, elytron with black humeral, median and apical spots, pygidium with single large black spot (Fig.21). Legs and antennomeres I to VI ochreous, club black. Frons narrow. Pronotum vaulted above level of elytra, strongly inclined apically, with distinctly sinuate lateral margins and very fine discal punctation. Elytron convex, with one long and one short row of coarse discal punctures, punctation fine on discal centre, coarser on apical third. Male profemur weakly incurved, pubescent ventrally. All tibiae weakly incurved, evenly slender. Aedeagus (Fig.44) with median lobe tapering beyond middle. Parameres (Fig.65) apically incurved and enlarged. Internal sac complex (Fig.80).

Type material. Holotype, male, from "Gopaldhara, Nepal-Sikkim Frontier H.Stevens 10.IX.18" (BMNH), examined.

Material examined, 5 specimens: Nepal, Parsa distr., nr. Birganj Lothar, 5-19.IX.1967 (Canadian Nepal Exp.) (CNC, MHNG).

Distribution. India: Darjeeling distr., Nepal.

Scaphidium species

Similar to *S. septemnotatum* but with less vaulted pronotum, the pronotal spots lying basally and the elytron without humeral spot (Fig.22). It possibly represents an undescribed species.

Material examined, 1 female:. Nepal, Parsa distr., nr. Birganj Lothar, 450 ft, 5.IX.1967 (Canadian Nepal Exp.) (CNC).

Hemiscaphium Achard

Hemiscaphium Achard, 1922; type species: *Scaphidium striatipenne* Gestro, 1879, by original designation.

Achard (1922b) assigned to this genus 12 species, all confined to south east Asia. Their descriptions are incomplete and useless not only for a phylogenetic analysis but even for identification. Further species of this genus were described in *Scaphidium*. Only one species is known to occur in the Himalayan region.

Hemiscaphium brunneopictum Achard

Hemiscaphium brunneopictum Achard, 1922b: 35.

Diagnostic characters. Length 3.3 - 3.7 mm. Head, most of body and legs ochreous. Pronotum with two dark brown or black elongate median spots and with minute spot on central part of each lateral margin. Elytron with base, apex, pseudopleuron and epipleuron dark brown to black, and with dark transverse fascia on centre of disc (Fig.24). Center of pygidium usually darkened. Antennomeres I to VI ochreous, VII to X black, XI more or less pale. Pronotum with lateral margins weakly convex or oblique; discal punctation very fine, sub-basal row of punctures lying in impressed stria, not interrupted at middle. Elytron with two long discal rows of coarse punctures, accompanied by one short inner and two short outer rows of coarse punctures; discal punctation very fine on basal half, coarse on apical third. Male femur slender, not modified. Male protibia weakly incurved, almost evenly slender, protarsi not lobed, with segments 1 to 3 somewhat wider than in female. Aedeagus (Fig.46) slender, median lobe weakly narrowed apically, with rounded apex. Parameres (Fig.67) straight, hardly enlarged at apex. Internal sac moderately complex (Fig.84).

Type material. Lectotype, female, labelled "Karen Mts Birma" (NMP), by present designation.

Material examined, 10 specimens: Nepal, Sankhua Sabha distr., bottom Arun Valley below Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG) 3; Arun R., 800 m, Hedanga-Num, 16.VI.1983 (Brancucci) (NMB) 1; India, West Bengal, Darjeeling distr., Sukna, 200 m, 7.X.1978 (Besuchet & Löbl) (MHNG) 1; same but Sevoke (MHNG) 1; Meghalaya, Garo Hills, above Tura, 3500-3900 ft., 15.VII.-30.VIII.1917 (Kemp) (ZSI, MHNG) 3; "Ober-Assam" (Hartert) (ZSM) 1.

Distribution. Burma, India, Nepal.

Cyparium Erichson

Cyparium Erichson, 1845; type species: *Cyparium palliatum* Erichson, 1845, by monotypy.
Yparicum Achard, 1920b; type species: *Yparicum yunnanum* Achard, 1920, by monotypy. - syn. nov.

Achard distinguished *Yparicum* from *Cyparium* by the presence of a row of denticles on the outer margin of the protibia in the former genus. Obviously, he overlooked that the outer margin of the protibiae bears a row of denticles in all species of *Cyparium*.

This genus is poorly represented in the Himalayan collections. Five species occur in North India, but none was yet found in Nepal.

KEY TO THE HIMALAYAN SPECIES OF *Cyparium*

1 Body black, elytron with yellowish humeral spot and yellowish apical fascia, not microsculptured ..... *montanum* Achard
– Colour pattern different, elytron with or without microsculpture 2
2 Elytron yellowish or ochreous, with dark brown or black pattern along discal rows of punctures, along sutural and along lateral margins ..... *bowringi* Achard
– Elytron more or less dark reddish, without distinct colour pattern 3
3 Metasternum entirely very finely punctate ..... *plagipenne* Achard
– Metasternum with lateral portion much coarser punctate than centre 4
4 Body not iridescent. Length 2.8 mm ..... *khasianum* Löbl
– Body iridescent. Larger species ..... species indet.

Cyparium montanum Achard

Cyparium montanum ACHARD, 1922c: 41; CHAMPION, 1927: 272; LÖBL, 1984: 60.

Diagnostic characters. Length 3.1 - 3.5 mm. Body not iridescent, black, elytron with small yellowish humeral spot and larger yellowish apical fascia. Antennomeres I to VI ochreous, antennal club dark brown or black. Elytron with four rows of discal punctures, surface laterad of outer row coarsely and irregularly punctate. Elytral microsculpture absent, microsculpture on visible tergites conspicuous, consisting of punctures. Metasternum much coarser punctate laterally than on centre. Aedeagus (Fig.85) with long, slender apical portion of median lobe, internal sac simple, parameres slender, sinuate.

Type material. Lectotype from Simla, (India, Himachal Pradesh) (BMNH), designated in CHAMPION (1927), not examined.

Material examined, 11 specimens. India, Himachal Pradesh, Baroq forest 4 km SW Solan, 1500 m, 8.X.1988 (Vit) 2; Solan, N end, 1300 m, 9.X.1988 (Vit) 2; 10 km NW Sarahar, 1700 m, 7.X.1988 (Vit) 2; Kulu Valley, Naggar, 1850 m, 16.X.1988 (Vit) 4; Kulu Valley, Vashisht, 1900 m, 13.X.1988 (Vit) 1 (all MHNG).

Distribution. India (Himachal Pradesh, Uttar Pradesh, West Bengal), Bhutan.

Remarks. This species may be readily distinguished by its conspicuous colour pattern. The specimens from Himachal Pradesh and from Uttar Pradesh were found on decaying plant debris and on decaying fungi.

Cyparium bowringi Achard

Cyparium bowringi ACHARD, 1922c: 42; LÖBL, 1979: 84; 1984: 59; 1991: 126.

Diagnostic characters. Length 3.5 - 3.9 mm. Body iridescent, dark brown to black. Elytron yellowish or ochreous, with dark brown to black pattern along sutural and lateral margins, and on discal rows of punctures. Antennomeres I to VI yellowish, club dark brown. Elytral disc with four rows of coarse punctures starting basally or sub-basally and with two short lateral rows starting behind a small, irrerularly punctate area. Elytral microsculpture distinct. Visible tergites with microsculpture

consisting of striae. Metasternum entirely very finely punctate. Aedeagus (Fig.86) with rather short, narrow apical portion of median lobe. Internal sac simple, bearing long, basally incurved duct, without sclerites. Parameres moderately long, straight in lateral view.

Type material. Lectotype, female, from Java, designated in Löbl (1979).

Material examined, 11 specimens. India, Himachal Pradesh, 10 km NW Sarahan, 1700 m, 7.X.1988 (Vit) (MHNG).

Distribution. India (Himachal Pradesh, Meghalaya, Tamil Nadu), Indonesia (Java).

Remarks. The species may be readily distinguished by the elytral coloration (see LÖBL 1991).

Cyparium plagipenne Achard

Cyparium plagipenne Achard, 1922c: 41; CHAMPION, 1927: 271; LÖBL, 1984: 60.

Diagnostic characters. Length 3.5 - 3.7 mm. Body not iridescent. Head and thorax dark brown to blackish. Elytra reddish, laterally and apically paler than on centre. Abdomen darker than elytra, paler than thorax. Antennae brown, club more or less darkened. Elytron microsculptured, with four discal rows of coarse punctures and with a lateral group of coarse punctures forming one or two short rows. Microsculpture on visible tergites consisting of transverse striae. Entire metasternum very finely punctate and distinctly microsculptured. Aedeagus (Fig.87) with apical portion od median lobe short, rather robust. Internal sac with setose and papilar structures and bearing sclerites. Parameres each sinuate in lateral view.

Type material. Lectotype, male, labelled "India Orient" designated by Champion 1927, examined.

Material examined. In addition to the lectotype, two specimens from "India Orient" (NMP) and from "W.Almora divn. Kumaon U.P. Oct. 1917 H.G.C.", both recorded in Champion 1927 as C. plagipenne (BMNH).

Distribution. North India.

Remarks. The Kumaon specimen is a female differing from the lectotype and from the second specimen labelled "India Orient" by the brighter reddish elytra and darker antennal club. As *C. plagipenne* is well defined by the aedeagal characters only, additional material is needed to confirm the specific assignment of the Kumaon specimen.

Cyparium species

A female specimen from "Sikkim: Gopaldhara, Rungbong Vall. H.Stevens" (BMNH) identified by CHAMPION (1927) as *C. plagipenne* differs by the iridescent body and by the metasternum laterally more coarsely punctate than on the centre. It possibly represents an undescribed species.

Pseudobironium Pic

Pseudobironium Pic, 1920; type species: *Pseudobironium subovatum* Pic, 1920, by monotypy.
Morphoscapha ACHARD, 1920; type species: *Morphoscapha grossum* Achard, 1920, by original designation.

Most of the 22 members of the genus are distributed in subtropical and tropical Asia. Two species, *P. lewisi* Achard and *P. ussuricum* Löbl, occur in temperate eastern Asia. *Pseudobironium globosum* Löbl from New Caledonia is of uncertain relationship and the sole species occuring southeast of the Wallace Line. The possibly sister group of *Pseudobironium*, *Pseudobironiella* Löbl, is restricted to Madagascar.

As in the three previous genera, many species of *Pseudobironium* are inadequately described and/or their male sexual characters are unknown. At the moment it is difficult to define species groups although several species share possible synapomorphies absent from other members of the genus: *P. sparsepunctatum* (Pic) and *P. languei* (Achard) have a short and stout maxillary palpus; *P. almoranum* Champion and *P. ussuricum* Löbl are characterized by short und stout antennal segments VII to XI; *P. vitalisi* (Achard), *P. carinense* (Achard), *P. castaneum* Pic and *P. rufitarse* sp.n. share wide parameres (the parameres are slender in *P. bicolor* sp.n., *P. feai* Pic, *P. fasciatum* Löbl, *P. impressipenne* Löbl, *P. ineptum* sp.n., *P. lewisi* Achard, *P. plagifer* Löbl, *P. sinicum* Pic, and *P. subglabrum* (Löbl); *P. vitalisi* and *P. castaneum* have the lateral wall of the median lobe tuberculate. *Pseudobironium globosum* Löbl, with reduced tibial spurs, is distinguished by the aedeagus with a particularly elongate flagellum.

Key to the Nepalese species of *Pseudobironium*

1 Pronotum and elytra with distinct colour pattern ..... *bicolor* sp.n.
– Body uniformly black or very dark reddish-brown 2
2 First abdominal ventrite not microsculptured laterally ..... *ineptum* sp.n.
– Entire abdomen, including first visible ventrite, microsculptured 3
3 Antennomeres VII to XI stout, XI usually not quite 2x as longe as wide ..... *almoranum* Champion
– Antennomeres VII to XI slender, XI 2.5 to 4x as long as wide 4
4 Body, femora and tibiae dark reddish-brown or reddish-black, not deep black. Antennomere VI much shorter than XI ..... *castaneum* Pic
– Body, apex of abdomen excepted, femora and tibiae deep black. Antennomere VI as long as XI ..... *rufitarse* sp.n.

Pseudobironium bicolor sp.n.

Holotype, male, Nepal, Sankhua Sabha distr., bottom Arun Valley below Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG).

Paratypes, 6: Nepal, as holotype, 3 females; India, Meghalaya, Khasi Hills, between Mawsynram and Balat, 16 km from Mawsynram, 1000 m, 27.X.1978 (Besuchet & Löbl) (MHNG) 1 female; Meghalaya, Garo Hills, above Tura, 3500-3900ft., 15.VII.-30-VIII.1917 (Kemp) (ZSI) 1 female; Thailand, Chiang Mai prov., Doi Pui, 1250 m, 14.III.1982 (Rougemont) (MHNG) 1 female.

D i a g n o s i s . Medium-sized species with distinct colour pattern on pronotum and on elytra (Fig.25). Median and apico-lateral portion of metasternum microsculptured. Abdomen with microsculpture consisting of striae. Parameres of aedeagus enlarged apically; internal sac bearing central and lateral sclerites.

D e s c r i p t i o n . Length 2.8 mm. Body and legs ochreous or reddish-brown. Pronotum with dark brown to black median spot enlarged anteriad (sometimes T-shaped), and with darkened basal margin. Elytron darkened along margins, and with dark basal and central spots. Apical segment of maxillary palpus 4x as long as wide, tapering. Antennae

long, segment II about 1.7x longer than III and somewhat longer than VI, segments VII to XI slender, XI 3.5 to 4x as long as wide, apically granulate. Pronotal and elytral punctation fine, on lateral areas finer than that on centre. Elytral disc evenly inclined apically, with puctation notably dense apically, sutural area flat. Pygidium very finely punctate. Median and apico-lateral portion of metasternum microsculptured, median portion of metasternum rather finely punctate, lateral portion of metasternum extremely finely punctate. Ventrites with microsculpture consisting of transverse striae. First visible ventrite with very fine punctation, hardly visible at 100x magnification. Meso- and metatibia somewhat incurved. Segments 1 to 3 of male protarsus notably widened, narrower than apex of protibia. Aedeagus (Fig.88) 0.86 mm long. Internal sac with lateral sclerites accompanying central tubes and with membranes bearing short denticulate structures. Parameres each enlarged apically.

R e m a r k s . *Pseudobironium bicolor* may be readily distinguished by its colour pattern. This species has been recorded from India and Thailand (LÖBL 1982; 1990b).

Pseudobironium almoranum Champion

Pseudobironium almoranum CHAMPION, 1927: 273; LÖBL 1969: 324; 1982: 160; 1986b: 343.

D i a g n o s t i c c h a r a c t e r s . Body black, apical segment of maxillary palpus slender, tapering. Antennae short, segments VII to XI short, XI usually less than 2x as long as wide. Pronotal and elytral punctation fine. Lateral portion of metasternum very finely punctate, without microsculpture. Ventrites with distinct microsculpture consisting of punctures. Aedeagus (Fig.89) 0.76 - 0.86 mm long. Internal sac with simple flagellum extended to level of weakly sclerotized valves, bearing setose apical structures. Parameres slender, almost straight.

T y p e m a t e r i a l . Lectotype, female, and 2 paralectotypes, females, labelled "Kumaon W.Almora India H.G.C." (BMNH), by present designation.

M a t e r i a l e x a m i n e d , 21 specimens: Nepal, Mustang distr., Kali Gandaki Khola, Kalopani, 2400 m, 17-19.V.1984 (Holzschuh) (MHNG) 1; Patan distr., Phulcoki, 1700 m, 10.V.1981 (Löbl) (MHNG) 3; Sindhupalcok distr., Pokhare NE Barahbise, 2700 m, 7.V.1981 (Löbl & Smetana) (MHNG) 1; Sankhua Sabha distr., Chichila - Mure, 1900 m, 24.V.1980 (Wittmer) (NMB) 1; Chitre, 2200-2400 m, 28-29.V.1985 (Holzschuh) (MHNG) 1; Gorza, 2100 m, 5-6.VI.1985 (Brancucci) (NMB) 1; above Pahakhola, 2600-2800 m, 31.V. - 3,VI.1988 (Martens & Schawaller) (SMNS, MHNG) 4; Arun Valley, between Mure and Hurure, 2050-2150 m, 9-17.VI.1988 (Martens & Schawaller) (SMNG, MHNG) 4; Chichila, 1900 m, 18-20.VI.1988 (Martens & Schawaller) (SMNS, MHNG) 2; Taplejung distr., SE Yamputhin, 2000-1650 m, 20. and 30.IV.1988 (Martens & Schawaller) (SMNS) 2; Yamputhin, 1650-1800 m, 26.IV. - 1.V.1988 (Martens & Schawaller) (MHNG) 1.

D i s t r i b u t i o n . North India: Himachal Pradesh, Uttar Pradesh, Nepal.

Pseudobironium rufitarse sp.n.

Holotype, male: Nepal, Taplejung distr., Yamputhin, open forest, 1650-1800 m, 26.IV.-1.V.1988 (Martens & Schawaller) (SMNS).

Paratypes: as holotype, 2 females (SMNS, MHNG).

D i a g n o s i s . Body black. Elytron with subapical hump. Metasternum without microsculpture. Abdominal microsculture consisting of short transverse arcs. Aedeagus

with parameres robust, sinuate; apex of median lobe incurved and pointed, internal sac bearing extremely fine setose structures and very slender median tube.

Description. Length 3.4 mm. Body black, apical abdominal segments reddish. Antennomeres I to VI ochreous, club brown. Femora and tibiae black, tarsi ochreous. Apical segment of maxillary palpus 3.5 - 4x as long as wide, tapering. Antenna long, with slender segments III to XI; III somewhat shorter than II, segment VI about 1.6x longer than III, as long as XI, latter 2.5 - 3x as long as wide. Pronotal punctation very fine. Elytron with small subapical hump. Sutural area flat anteriorly, somewhat raised apically. Elytral punctation near base very fine, similar to that of pronotum, becoming gradually coarser apically. Pygidium very finely punctate. Metasternum without microsculpture. Middle portion of metasternum densely and coarsely punctate, except on impunctate middle line. Lateral portion of metasternum very finely punctate. All tibiae somewhat incurved. Segments I to III of male protarsus conspicuously enlarged, basal segment wider than apex of tibia. Segments I to III of male mesotarsus somewhat widened. Aedeagus (Figs 92-94) 1.32 - 1.33 mm long. Median lobe gradually narrowed apically, with incurved and pointed tip. Parameres robust, sinuate in dorsal view, almost straight and gradually narrowed in lateral view. Internal sac with long thin median tube and with membranes bearing apical setose structures.

Remarks. This species may be readily distinguished by the pale tarsi constrasting with the dark tibiae and body. It is well characterized also by the shape of the median lobe and parameres.

Pseudobironium ineptum sp. n.

Holotype, male: Nepal, Sankhua Sabha distr., bottom Arun Valley below Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG).

Diagnosis. Body reddish. Elytron without subapical hump. Metasternum and lateral portion of first ventrite lacking microsculpture. Abdominal microsculpture consisting of punctures. Aedeagus with almost straight, slender parameres and short, incurved tip of median lobe. Internal sac with long flagellum and a pair of incurved central valves.

Description. Length 2.7 mm. Body, femora and tibiae reddish-brown, apex of abdomen and tarsi paler. Antennae ochreous. Apical segment of maxillary palpus about 2x as long as wide, tapering. Antennae long, segments III to XI slender, III almost as long as II, VI about 1.5x longer than III, shorter than XI, latter almost 3x as long as wide. Pronotal punctation fine. Elytral disc regularly inclined toward narrow, flattened apical area, with punctation coarser than that on pronotum; sutural area flat. Metasternum without microsculpture, middle portion densely and rather coarsely punctate, except for impunctate median line. Lateral portion of metasternum very finely punctate. First abdominal ventrite very finely punctate, laterad without, in middle with, microsculpture. Abdominal microsculpture consisting of punctures, almost obsolete on pygidium, distinct on propygidium. Meso- and metatibia weakly incurved. Segments I to III of male protarsus strongly widened, narrower than apex of tibia. Segments I to III of male mesotarsus somewhat enlarged. Aedeagus (Figs 90,91) 1.0 mm long. Median lobe irregularly narrowed towards apex, with short incurved tip. Parameres slender, each moderately incurved near base, beyond almost straight, evenly wide between expanded base and apex. Internal sac with very long, almost straigh flagellum, two central valves formed by filamentous laminae, and with short stick-like sclerites.

Remarks. This species may be distinguished from other members of the genus of similar size and colour by the shape of the parameres in combination with the metasternum lacking visible microsculpture.

Pseudobironium castaneum Pic

Pseudobironium castaneum Pic, 1923: 17.

Diagnostic characters. Large-sized species with dark reddish to blackish body. Apical segment of maxillary palpus slender and tapering. Antenna long, segments VII to XI slender, XI 3.5 - 4x as long as wide. Punctation on pronotal disc fine, that on elytral disc rather coarse. Lateral portions of metasternum and of 1st abdominal ventrite very finely punctate, former without microsculpture, latter with microsculpture consisting of punctures. Aedeagus (Figs 95,96) 1.34 - 1.40 mm long. Median lobe wide, with lateral tubercles, abruptly narrowed at apex, with bilobed ventral process. Membranes of internal sac lamellar, flagellum accompanied by stick-like sclerites. Parameres robust, each enlarged sub-basally and forming a lobe extended to median line; apical portion of parameres moderately enlarged in dorsal view.

Type material. Lectotype, male, labelled "Lac Tho Tonkin" (MNHN), by present designation.

Material examined, 4 specimens: Nepal, Sankhua Sabha distr., bottom Arun Valley bellow Num, 1050 m, 22.IV.1988 (Löbl & Smetana) (MHNG).

Distribution. Vietnam, Nepal.

Remarks. This species is very similar to *P. carinense* (Achard) which differs by the absence of tubercles on the lateral wall of the median lobe. The Nepalese specimens of *P. castaneum* are somewhat darker than the specimens from Vietnam I have seen.

Baeocera Erichson

Baeocera Erichson, 1845; type species: *Baeocera falsata* Achard, 1920, by subsequent designation (Opinion 1221) ICZN 1982.
Sciatropes Blackburn, 1903; type species: *Sciatropes latens* Blackburn, 1903, by monotypy.
Cyparella Achard, 1924; type species: *Scaphisoma rufoguttatum* Fairmaire, 1898, by monotypy.
Eubaeocera Cornell, 1967; type species: *Baeocera abdominalis* Casey, 1900, by original designation.
Amaloceroschema Löbl, 1967 (sg); type species: *Baeocera* (*Amaloceroschema*) *freudei* Löbl, 1967, by original designation.

This speciose genus is well represented in the Himalaya. Forty species have been distinguished and named but seven additional species known in female sex only were recognised in the collections studied. These are not included in the present study. For practical reasons the four species known only from Meghalaya (*B. senilis*, *B. pseudincisa*, *B. hygrophila*, and *B. montrosetibialis*) are included in the key provided below.

Baeocera montana (Pic, 1955) was transferred to *Baeocera* from *Scaphisoma* in Löbl (1987b: 845). Hence, *Baeocera montana* Löbl, 1971 from India is a secondary junior homonym. I replace the name *Baeocera montana* Löbl by *Baeocera montanella* nom. nov.

Among the 30 species found in Nepal Himalaya 11 are new and appear to be endemic to certain areas of the eastern half of the Nepal territory. This is a considerably high percentage of endemism when compared to that in the Western Himalaya where only two species out of 15 are possibly endemic. In the Darjeeling district only three species out of 14 appear to be endemic.

Although all Himalayan *Baeocera* were found in moist forest litter, many show little macrohabitat preferences. *Baeocera ventralis* is common in the evergreen dipterocarp forest and in the subtropical deciduous forest, but occurs also in the temperate, mixed broad-leaved and oak forest up to about 2000 m altitude. Other species exhibit similar considerable range in vertical distribution, often exceeding 1000 m (e.g. *B. hamifera*, *B. khasiana*, *B. mussardi roberti*, *B. signata*, *B. sordidoides*, *B. vilis*, *B. wittmeri*). *Baeocera serendibensis* which occurs at 400 m altitude in the Corbett National Park in Kumaon was found up to 2750 m in Nepal, and the range of *B. microptera* extends from 1500 m in Himachal Pradesh to the alpine scrub zone at 4000 m in Khumbu Himal.

The Himalayan *Baeocera* belong to several species groups, defined mainly by the male genital characters, but only some of them are based on convincing synapomorphies (e.g. *curtula*, *excelsa*, *insolita*, *lenta*, *ventralis*, *monstrosa*, and *satana* groups):

1. The *brevicornis* group is characterized by the symmetrical, slender median lobe with apical portion tapering and moderately incurved apically; the ostium is situated apico-eudorsally and is covered by two overlapping membranous valves; the internal sac is armed with a slender, incurved elongate sclerite which is sometimes accompanied by a second slender sclerite. The parameres are symmetrical, slender and simple. Two subgroups can be recognised within this group: 1. The *brevicornis* subgroup, characterized by the body moderately convex both dorsally and ventrally. *Baeocera brevicornis* and *B. serendibensis* distributed throughout the Indian subcontinent, four additional East Asian species, *B. problematica* Löbl from Kenya and several unnamed Afrotropical species belong here. 2. The *nobilis* subgroup is characterized by the strongly convex body. *Baeocera sordidoides* from Nepal, *B. sordida* Löbl from Japan and the Mediterranean *B. nobilis* Reitter are assigned to this subgroup.

2. The monospecific *laminula* group. It shares the essential characters with the *nobilis* subgroup, but the internal sac is covered by very fine setae and spines, and is armed by three distal sclerites.

3. The monospecific *inermis* group shares the aedeagal characters with the former two groups, but the internal sac lacks any sclerotized structures. The metacoxae are approximate.

4. The *pilifera* group is characterized by the median lobe similar to that in the former groups but with the distal portion short. The internal sac is armed by a single, slender and proximally incurved sclerite. The parameres are symmetrical, enlarged and pubescent. The short basal angles of the pronotum which do not cover the mesepimeral ridge is another possible synapomorphy of the group to which *Baeocera pilifera* from the Darjeeling district, and *B. schwendingeri* Löbl and *B. pyricola* Löbl from Thailand are assigned.

5. The monospecific but polytypic *mussardi* group is characterized by the symmetrical aedeagus with the median lobe consisting of moderately large basal and long distal portions. The ostium is situated dorsally near apex of the median lobe and the valves are contiguous medially. The internal sac is vesicular and weakly sclerotized, with minute basal sclerites. The parameres are strongly enlarged in sagital plane. The tarsi are consicuously short.

6. The monospecific *khasiana* group is characterized by the symmetrical aedeagus similar to that of the species of the *brevicornis* group, but with the distal portion of the median lobe relatively short. The internal is complex sac, bearing overlapping flat sclerites, and membranes covered by setose and spinose structures.

7. The *lenta* group is characterized by the symmetrical median lobe and parameres, similar to those of the species of the *brevicornis* group, although they are usually wider. The internal sac is armed with two or three unevenly long, curved, flattened and partly

overlapping sclerites, which are joined proximally and form a more or less complex structure; accessory basal sclerites are often present. The ejaculatory duct is thin and not sclerotized, enters in the proximal end of the sclerites and reappears at the distal end of the longer dorsal sclerite; the distal portion of the ejaculatory duct is very long, extrudes from the ostium and usually formes several rings on the external surface of the median lobe; the proximal portion of the ejaculatory duct enters often at an enlarged or vesicular portion before reaching the complex of sclerites. In the *lenta* group the metepisternum is often obsolete with suture indicated by a row of punctures.

Most of the Asian and several Melanesian species are assigned to this group, in addition to *B. pacifica* Löbl from the Caroline Is., *B. australica* Löbl from Australia and *B. umtalica* Löbl from Zimbabwe. It includes following Himalayan species: *B. cribrata*, *B. crinita*, *B. inculta*, *B. lenta*, *B. longicornis*, *B. manasensis*, *B. martensi*, *B. microps*, *B. microptera*, *B. pigra*, *B. pseudincisa*, *B. pseudovilis*, *B. puncticollis*, *B. reducta*, *B. signata*, *B. vesiculata*, *B. vilis*, and *B. wittmeri*. *Baeocera martensi*, *B. pigra*, *B. wittmeri*, and *B. vidua* Löbl from Thailand have in common the internal sac bearing short sclerites accompanied by rows of sclerotized, apically pointed scales, situated at the left side of the ejaculatory duct. These three species may be separated in a distinct subgroup (subgroup *pigra*). Another subgroup seems to be formed by *B. vilis*, *B. pseudovilis* and *B. inculta* which have the dorsal sclerite of the internal sac enlarged and apically not delimited from membranous structures.

8. The *ceylonensis* group shares most characters with the *lenta* group, but the aedeagus differs in having the internal sac bearing a proximal tuft of sclerotized spines. In addition, the species of the group have notched parameres, characteristic elytral punctation, and a distinct metepisternum. The group includes five Oriental species : *B. ceylonensis* (Löbl), *B. dilutior* Löbl, *B. franzi* (Löbl), *B. semiglobosa* (Löbl) and *B. ventralis* (Löbl). The latter is widely distributed and occurs also in the Himalaya.

9. The monospecific *senilis* group is characterized by the symmetrical aedeagus with tapering median lobe split apically in ventral and dorsal lobe (bilobed type). The ostium is situated apically. The internal sac is armed by a simple stick-like sclerite. The parameres are straight and slender.

10. The monospecific *excelsa* group shares the bilobed median lobe with the *senilis* group, but the internal sac has a long, flat, spiral sclerite, and the parameres are enlarged.

11. The *insolita* group is defined by the trilobed distal portion of the median lobe. The basal bulbous portion of the median lobe is very large, with the feebly sclerotized apico-dorsal portion overlapping the base of the unpaired, large ventral lobe, and paired narrow dorsal lobes. The internal sac is complex, bearing numerous overlapping scales, spines and denticles. Large sclerites are absent. The parameres are slender, simple, and symmetrical. The group includes *B. insolita* Löbl from Thailand and *B. schawalleri* from Nepal.

12. The monospecific *bengalensis* group is defined by the very large and somewhat asymmetrical bulbous basal portion of the median lobe which ovelaps apically the ostium and the base of the symmetrical, short and flat distal portion. The armature of the internal sac consists of large and strongly sclerotized denticles, stick-like pieces and pointed scales. The parameres are symmetrical, slender and simple. The sister group of the *bengalensis* group is possibly the *macrops* group which differs notably in having the distal portion of the median lobe asymmetrical.

13. The *curtula* group includes species having a large symmetrical median lobe with a long distal portion, the dorsal wall of which is uneven, formed by two valves. The ostium is situated latero-apically. The internal sac is provided with a long, more or less

strongly sclerotized flagellum and is armed by one or two flagellar guide-sclerites. *Baeocera kapfereri* Reitter from North Africa and six Asiatic species: *B. curtula* Achard, *B. freyi* Löbl, *B. hammondi* Löbl, *B. callida* Löbl, *B. hamifera* Löbl, and *B. mustangensis* sp.n. are assigned here. The latter three occur in the Himalayan region. Several New World species (*deflexa* and *congener* groups) are close to this group.

14. The *monstrosa* group is characterized by the asymmetrical aedeagus with the basal bulbous portion of median lobe very large and more or less overlapping the ostium, and by the small, strongly sclerotized and irregularly curved distal portion. The internal sac is extremely complex, with overlapping large sclerotized teeth and membranes covered by scales, papillae and spines. The flagellum is absent. The parameres are asymmetrical, one is lobed, the other one bears usually an apophyse. *Baeocera monstrosa* (Löbl), *B. inaequicornis* Champion and *B. gilloghyi* (Löbl) occuring in the Himalaya, *B. paradoxa* (Löbl) from Sri Lanka, several additinal Oriental species, and the Japanese *B. nakanei* Löbl belong to this group.

15. The *satana* group includes species with the distal portion of the median lobe split dorsally, forming two asymmetrical, strongly sclerotized pieces. The left piece is pointed and short, the right piece is long and usually lobed. The ostium (not seen) is apparently situated between these pieces. The internal sac lacks flagellum and is very complex, armed by sclerotized teeth-like structures and by membranous spines-like structures and papillae. The parameres are asymmetrical, more or less enlarged but simple. In the male the metatibiae are modified and the colour pattern differs from that in the female. In addition to *B. satana* Nakane from Japan, five Himalayan species belong here: *B. dentipes*, *B. errabunda*, *B. monstrosetibialis*, *B. thoracica*, and *B. tuberculosa*.

Key to the Himalayan species of *Baeocera* (including Meghalayan species)

1 Lateral portion of metasternum very finely punctate, with punctures barely distinct at 100x magnification 2
– Lateral portion of metasternum coarsely punctate, with punctures distinct at 24x magnification 15
2 Sutural stria extended along elytral base to form basal stria joined with lateral stria ..3
– Basal stria, not joined with lateral stria 9
3 Propygidium and pygidium very finely punctate. Body very dark reddish-brown to black 4
– Propygidium and pygidium with coarse punctures 6
4 Distal portion of median lobe bearing ventral bidentate lobe; apex of paramere enlarged ..... *mustangensis* sp. n.
– Distal portion of median lobe without any ventral protuberance; apical half of paramere equally wide 5
5 Flagellum of internal sac slender, joined with proximal end of sclerotized complex; flagellar guide-sclerite flat, curved at apex, not hook-shapes ..... *callida* Löbl
– Flagellum of internal sac wide and moderately long, joined with central part of sclerotized complex; flagellar guide-sclerite robust, hook-shaped ..... *hamifera* Löbl
6 Parameres simple 7
– One paramere with apophysis 8
7 Parameres almost straight, truncate at apex ..... *gilloghyi* (Löbl)
– Parameres irregularly curved, hook-shaped at apex ..... *pubescence* Löbl

8 Right paramere with basal apophysis, left paramere enlarged and lobed apically .... *inaequicornis* Champion
– Right paramere simple, left paramere with large apophysis starting from centre .... *monstrosa* (Löbl)
9 Mesocoxal line arcuate, finely punctate..... *khasiana* Löbl
– Mesoxocal line parallel or subparallel to coxal foramen, coarsely punctate 10
10 Length 1.4 mm. Body uniformly pale reddish-brown ..... *bengalensis* Löbl
– Larger species. Colour pattern different 11
11 Male metatibia with one or more denticles on inner side near base. Elytra more or less dark, never black 12
– Male metatibia not dentate. Body entirely black in female, black with ochreous prothorax and metepisternum in male 14
12 Inner side of male metatibia bearing numerous minute denticles .... *monstrosetibialis* Löbl
– Inner side of male metatibia bearing one to three sub-basal teeth 13
13 Parameres slender and sinuate, apically not or weakly narrowed ..... *thoracica* sp. n.
– Parameres incurved, left paramere with middle portion wider than that of right paramere, narrowed apically ..... *dentipes* Löbl
14 Male with basal and apical pronotal margins black. Median lobe strongly enlarged apically ..... *tuberculosa* sp. n.
– Pronotum entirely ochreous in male. Median lobe not enlarged apically .... *errabunda* sp. n.
15 Hypomeron distinctly punctate 16
– Hypomeron impunctate 19
16 Sutural stria short, evanescent before reaching level of elytral base 17
– Sutural stria long, curved along pronotal lobe and extended laterally along elytral base 18
17 Entire hypomeron coarsely punctate; mesepisternum distinctly punctate. Lateral portion of pronotum much more coarsely punctate than pronotal centre *cribrata* sp.n.
– Only small area of hypomeron punctate; mesepisternum impunctate. Pronotum evenly punctate ..... *puncticollis* Löbl
18 Metepisternum indistinct ..... *microptera* Löbl
– Metepisternum large, separated from metasternum by deep suture ..... *excelsa* Löbl
19 Sutural stria reduced, not visible on anterior part of elytron 20
– Sutural stria longer, reaching elytral base 22
20 Antennae short, segment VIII not or somewhat longer than wide. Small species 1.0 - 1.1 mm long ..... *crinita* sp. n.
– Antennae longer, segment VIII elongate. Larger species 21
21 Sutural stria visible only on apical part of elytron ..... *reducta* sp. n.
– Sutural stria longer, distinct between apex and basal 1/3 to 1/5 of sutural length .... *hygrophila* Löbl
22 Sutural stria not extended along elytral base 23
– Sutural stria curved at base and more or less extended along elytral base 24
23 Length 0.9 - 1.0 mm. Antenna short, segment VIII about as long as wide .... *microps* Löbl
– Length 1.75 - 2.25 mm. Antennae long, segment VIII slender, much longer than wide. Metatarsus conspicuously short, only somewhat longer than half of metatibia .....*mussardi* (Löbl)
24 Punctation of elytron and pronotum very fine, or elytron with few somewhat larger punctures 25

– Punctation of elytron notably coarser than that of pronotum, often irregular, or coarsely punctate area restricted to anterior half of elytron 28
25 Apex of median lobe exceeding somewhat level of mid-length of parameres .... *inermis* Löbl
– Apex of median lobe reaching almost level of apices of parameres 26
26 Internal sac of aedeagus with simple, straight long median sclerite ..... *senilis* Löbl
– Internal sac of aedeagus different 27
27 Internal sac with two slender sclerites, one almost straight and flat, second curved, narrowed and pointed apically ..... *sordidoides* sp. n.
– Internal sac with asymmmetrical apical sclerotized lamina accompanied by two slender elongate sclerites ..... *laminula* sp. n.
28 Elytron with basal stria extended to middle of basal margin or to humeral area, not joined with lateral stria 29
– Basal stria of elytron extended laterally and joined with lateral stria 34
29 Most of basal half of elytron coarsely punctate, remaining elytral surface impunctate or very finely punctate, with punctures about as tiny as those on pronotum 30
– Elytral punctation different 31
30 Parameres curved, with emarginate middle of inner margin, not narrowed apically .... *ventralis* (Löbl)
– Parameres straight, dentate, narrowed in apical half ..... *manasensis* Löbl
31 Metepisternum wide, separated from metasternum by distinct, finely punctate suture ..... *schawalleri* sp. n.
– Metepisternum not visible or very narrow, separated from metasternum by row of coarse punctures 32
32 Lateral margin of elytron straight. Elytral punctation relatively fine. Small species, 1.1 - 1.3 mm long ..... *signata* Löbl
– Lateral margin of elytron rounded, or straight in middle portion only 33
33 Parameres of aedeagus not or moderately narrowed apically. Membranes of internal sac covered by pointed scales ..... *lenta* (Löbl)
– Parameres of aedeagus much narrower in apical half than in basal half, dentate in middle. Membranes of internal sac with minute, extremely short spines .... *pseudincisa* Löbl
34 Lateral portion of metasternum with apical row of coarse punctures and a few coarse punctures near anterior and lateral margins. Parameres pubescent ..... *pilifera* Löbl
– Entire or most of lateral portion of metasternum covered by coarse punctures. Parameres smooth 35
35 Pronotal punctation rather coarse, distinct at 24x magnification ..... *martensi* sp. n.
– Pronotal punctation very fine, not or barely visible at 24x magnification 36
36 Metepisternum distinct, separated from metasternum by deep, punctate suture 37
– Metepisternum often indistinct, separated from metasternum by row of coarse punctures 38
37 Antenna short, segment VII almost 2x longer than segment VIII. Elytron rather finely punctate, with very finely punctate base. Base of 1st ventrite rugose .... *brevicornis* (Löbl)
– Antenna long, segment VII moderately longer than segment VIII. Elytron, base excepted, coarsely punctate. Base of 1st ventrite with elongate punctures .... *serendibensis* (Löbl)
38 Apical third to half of elytron very finely punctate, basal half of elytron coarsely punctate. First ventrite without any coarse punctures except those margining base 39

– Elytron entirely coarsely punctate, or punctation becoming gradually finer toward apex and almost evanescent on latero-apical area. First ventrite usually coarsely punctate beyond basal row of punctures 40
39 Parameres straight, evenly wide between apex and enlarged base .... *pseudovilis* Löbl
– Parameres sinuate, enlarged in middle and apically ..... *inculta* Löbl
40 Internal sac of aedeagus with large vesica, entered by ejaculatory duct before reaching complex of sclerites 41
– Internal sac of aedeagus without basal vesica 42
41 Parameres straight, parallel to each other ..... *vesiculata* Löbl
– Parameres somewhat curved, usually diverging apically ..... *longicornis* (Löbl)
42 Apex of median lobe of aedeagus situated far beyond level of mid-length of parameres. Elytron with rather large smooth latero-apical area ..... *vilis* Löbl
– Apex of median lobe of aedeagus situated at about level of mid-length of parameres. Elytron with narrow smooth latero-apical area, or entirely coarsely punctate 43
43 Parameres conspicuously narrow, parallel to each other, somewhat uneven ..... *wittmeri* Löbl
– Parameres rather wide, curved ..... *pigra* (Löbl)

New records

Baeocera serendibensis (Löbl)

Material examined, 199 specimens: Nepal, Mustang distr., Kali Gandaki Valley, Mishi N Ghasa, 21.IX.1971 (Franz) (Coll. H. Franz) 2; Kali Gandaki Valley, between Lete and Ghasa, 25.IX.1971 (Franz) (Coll. H. Franz) 1; Kaski distr., Khorkore near Pokhara, ravine, 26.IX.1977 (Franz) (Coll. H. Franz) 1; Tandarakot, trail Pokhara - Ghoropani, ca 1000 m, 18.IX.1971 (Franz) (Coll. H. Franz, MHNG) 6; Parbat distr., Ghoropani Pass, 2750 m, 5.X.1983 (Löbl & Smetana) 1; Gorkha distr., Buri Gandaki, Labubesi-Gorlabesi, 900-1000 m, 29.VII.1983 (Martens & Schawaller) (SMNS) 1; Darondi Kola between Sangu and Gorkha, 1200 m, 14.VIII.1983 (Martens & Schawaller) 1; Rasuwa distr., trail from Fulang Temple via Dinguari Khola, 150 m above bottom of valley, 11.X.1971 (Franz) (Coll. H.Franz) 1; Kathmandu distr., Nagarjun forest, 1650 m, 2.IV.1981 (Löbl & Smetana) (MHNG) 1; Nagarjun, Jamacok, 1400-1600 m, 18.VIII.1983 (Martens & Schawaller) (SMNS, MHNG) 6; Gokarna forest, 1400 m, 3.VIII.1970 and 3.X.1971 (Franz) (Coll. H. Franz) 4; Gokarna forest, 1.IX.1981 and 20.X.1983 (Löbl & Smetana) (MHNG) 12; Patan distr., 2 km S Godawari, 1700 m, 20.X.1983 (Löbl & Smetana) (MHNG) 1; Sankhua Sabha distr., below Sheduwa, 2550 m, 30.III.1982 (A. & Z. Smetana) (MHNG) 1; bottom Arun Valley below Num, 1050 - 1100 m, 21.-22.IV.1984 (Löbl & Smetana) (MHNG) 30; Arun Valley near Num, 1500 m, 29.III.1982 and 1500-1600 m, 10.IV.1982 (A. & Z. Smetana) (MHNG) 7; Ilam distr., between Ilam and Mai Pokhari, 1400-1600 m, 8.IV.1988 (Martens & Schawaller) (SMNS) 1; Taplejung distr., confluence of Kabali Khola and Tada Khola, 1000 - 1050 m, 23.-25.IV.1988 (Martens & Schawaller) (SMNS, MHNG) 52; ascent to Khebang from Tada Khola, 1500 m, 25.IV.1988 (Martens & Schawaller) (SMNS) 1; Yamputhin, 1650-1800 m, 26.IV.1988 (Marterns & Schawaller) (SMNS) 1; Yamputhin, 1650-1800 m, 26.IV.1988 (Marterns & Schawaller) (SMNS) 1; Yamputhin, 1650 -1800 m, 226.IV.1988 (Marterns & Schawaller) (SMNS) 3; India, Himachal Pradesh, Nahan, 930 m, 3.X.1988 (Vit) 1; 10 km NW Sarahan, N. Nahan, 1700 m, 7.X.1988, (Vit), 40; Baroq forest 4 km SW Solan, 1500 m, 8.X.1988 (Vit) 19; Kulu Valley, Vashisht Baths N. Manali, 1900 m, 13.X.1988 (Vit) 1; Kulu Valley, Naggar, 1850 m, 16.X.88 (Vit) 2; 12 km E Mandi, 750 m, 25.X.1988 (Vit) 3 (all Indian specimens in MHNG).

Distribution. Pakistan, India (Himachal Pradesh, Uttar Pradesh: Garhwal and Kumaon, West Bengal: Darjeeling distr., Assam, Meghalaya, Kerala), Sri Lanka, Western, Central and Eastern Nepal, Thailand.

Baeocera brevicornis (Löbl)

Material examined, 2 specimens: Nepal, Parsa distr., Terai, Amlekganj, 8.X.1972 (Franz) (Coll. H. Franz, MHNG).

Distribution. Sri Lanka, India (Kerala), Nepal.

Baeocera mussardi roberti Löbl

Material examined, 96 specimens: India, Uttar Pradesh, Mussoorie, Rabit Farm, 1300m, 10.VII.1989 (Riedel) (SMNS) 1; Nepal, Kathmandu distr., Rani Ban SE Sanogau, 1500-1600 m, 25.IV.1988 (Brachat) (MHNG) 1; Patan distr., Phulcoki SE Godawari, ca 1800 m, 22.IV.1988 (Brachat) (MHNG) 2; Dhading distr., Ankhu Kola Valley, Ankhu Sangu, 650 m, 24.-25.VII.1983 (Martens & Schawaller) (SMNS) 1; Sankhua Sabha distr., Arun Valley near Num, 1500-1600 m, 29.III. and 10.IV.1982 (A. & Z. Smetana) (MHNG) 27; bottom Arun Valley below Num, 1050-1100 m, 21.-22.IV.1984 (Löbl & Smetana) (MHNG) 56; bottom Arun Valley between Hedangna and Num, 950-1000 m, 6.-9.VI.1988 (Martens & Schawaller) (SMNS) 1; below Sheduwa, 2550 m, 30.III.1982 (A. & Z. Smetana) (MHNG) 1; Induwa Khola, 1750 m, 14.IV.1984 (Löbl & Smetana) (MHNG) 1; Dhankuta distr., Arun Valley, Lamobagar Gola, 1000-1400 m, 27.V.-3.VI.1980 (Holzschuh) (NMB) 1; Taplejung distr., confluence of Kabeli Khola and Tada Khola, 1000-1050 m, 23.-25.IV.1988 (Martens & Schawaller) (SMNS) 1; Yamputin cultural land, 1600-1800 m, 26.IV.-1.V.1988 (Martens & Schawaller) (SMNS) 1; Hellok in Tamur Valley, 2000 m, 17.V.1988 (Martens & Schawaller) 2.

Distribution. India (Tamil Nadu, Kerala, West Bengal: Darjeeling distr., Uttar Pradesh: Garhwal), Bhutan, Eastern and Central Nepal.

Remarks. The size of the body of *B. mussardi roberti* is rather variable. It is in several specimens similar to that in *mussardi* s.str. which occurs in Sri Lanka and in Thailand. The conspicuously coarse punctation of the pronotum and the punctate mesepimera in *roberti* provide good diagnostic characters. Most specimens of *roberti* were found in subtropical and in mixed broad-leaved forests.

Baeocera lenta (Löbl)

Material examined, 4 specimens: Nepal, Sankhua Sabha distr., Arun Valley bottom between Hedangna and Num, 950-1000 m, 6.-8.VI.1988 (Martens & Schawaller) (SMNS, MHNG), 3; Arun Valley bottom below Num, 1050 m, 20.IV.1984 (Löbl & Smetana) (MHNG) 1.

Distribution. Sri Lanka, India (Tamil Nadu, Kerala, Meghalaya), Eastern Nepal.

Remarks. This is a common species in Sri Lanka and in Southern India. The populations from Kerala and Tamil Nadu were described as *B. pseudolenta* Löbl, based on the seemingly significant characters in the shape of the basal portion of the sclerites of the internal sac. However, reexamination of the aedeagi, using better optics, showed that the previously observed differences are due partly to the different degree of the sclerotization of the aedeagus, and partly to the infraspecific variability. Hence, *Baeocera pseudolenta* Löbl, 1979 is junior synonym of *B. lenta* (Löbl, 1971) - syn. nov.

Baeocera longicornis (Löbl)

Material examined, 15 specimens: Nepal, Kaski distr., Pokhara Lake, hill facing temple near Pinta, 20.IX.1978 (Franz) (Coll. H. Franz) 1; Pande settle, via Pokhara, ca 2000 m,

29.IX.1971 (Franz) (Coll. H. Franz) 1; Gorkha distr., Darondi Khola betw. Doreni and Motar, 900-750 m, 13.VIII.1983 (Martens & Schawaller) 1; Kathmandu distr., Gokarna forest, 1.IV.1981 and 10.IX.1983 (Löbl & Smetana) 4; Sankhua Sabha distr., botton Arun Valley, below Num, 1050 m, 21.IV.1984 (Löbl & Smetana) 2; Taplejung distr., confluence of Kabeli Khola and Tada Khola, 1000-1050 m, 23-25.IV.1988 (Martens & Schawaller) (SMNS, MHNG) 4; Yamputhin, 1650 - 1800 m, 26.IV.1988 (Martens & Schawaller) 1.

Distribution. Sri Lanka, India (West Bengal: Darjeeling distr., Assam, Meghalaya, Uttar Pradesh: Kumaon and Garhwal), Western, Central and Eastern Nepal, Thailand.

Remarks. Most of the specimens previously recorded from Northern India as *B. vesiculata* belong to this species.

Baeocera vesiculata Löbl

Material examined, 7 specimens: Nepal, Myagdi distr., Myagdi Khola, Muri, 2100-2300 m, III.1970 (Martens) (SMNS) 1; Kathmandu distr., Nagarjun forest, 1650 m, 2.IV.1981 (Löbl & Smetana) 1; Patan distr., Godawari, 6000', 7.-13.VIII.1967 (Canadian Nepal Exp.) (CNC) 1; 2 km S Godawari, 1700 m, 20.X.1983 (Löbl & Smetana) (MHNG) 1, Sindhupalcok distr., above Chaubas, 2600 m, 5.IV.1981 (Löbl & Smetana) (MHNG) 1; Burlang Bhanjyang, 2600 m, 5.IV.1981 (Löbl & Smetana) (MHNG) 2.

Distribution. India (Kerala, Meghalaya), Western and Central Nepal.

Remarks. The tentatively associated females are not listed. The species may be distinguished from *B. longicornis* only by the shape of the parameres.

Baeocera pigra (Löbl)

Material examined, 1 specimen: Nepal, Kathmandu distr., Gokarna forest, 1400 m, 3.X.1971 (Franz) (Coll. H. Franz).

Distribution. Sri Lanka, India (Kerala, Tamil Nadu, Meghalaya, Assam, Uttar Pradesh: Kumaon), Central Nepal, Thailand.

Baeocera wittmeri Löbl

Material examined, 30 specimens: India, Uttar Pradesh, Mussoorie, Rabit Farm, 1300 m, 10.VII.1989 (Riedel) (SMNS) 1;Nepal, Kaski distr., Tandarakot, trail Pokhara - Ghoropani, ca 1000 m, 18.IX.1971 (Franz) (Coll. H. Franz) 1; Mustang distr., Kali Ghandaki Valley, between Lete and Ghasa, 25.IX.1971 (Franz) (Coll. H. Franz) 1; Kathmandu distr., Gokarna forest, 1.IV.81 and 10.IX.1983 (Löbl & Smetana) (MHNG) 2; Nagarjun forest near Kathmandu, 1650 m, 2.IV.1981 (Löbl & Smetana) (MHNG) 1; Patan distr., Godawari, 1600 m, 31.III.1984 (Löbl) (MHNG) 1; Phulcoki, near Dalikhel, ca 1900 m, 21.IX.1977 (Franz) (MHNG) 1; Sindhupalcok distr., above Chaubas, 2500 m, 4.IV.1981 (Löbl & Smetana) (MHNG) 2; Burlang Bhanjyang, 2600 m, 5.IV.1981 (Löbl & Smetana) (MHNG) 1, Solukhumbu distr., ravin near Shutje S Lughla, 7.X.1975 (Franz) (MHNG) 1; Sankhua Sabha distr., forest S Mangsingma, 2200 and 2300 m, 11. and 13.IV.1984 (Löbl & Smetana) (MHNG) 6; NE Kuwapani, 2250 m, 24.IV.1984 (Löbl & Smetana)1; Arun Valley , Chichila, 1900-2000 m, 18.-20.VI.1988 (Martens & Schawaller) (SMNS) 1; Chichila, 2300 m, 26.III.1982 (A. & Z. Smetana) 1; bottom Arun Valley below Num, 1050 and 1100 m, 20 .and 21.IV.1984 (Löbl & Smetana) (MHNG) 2; Arun Valley, between Mure and Hurure, 2050-2100 m, 17.VI.1988 (Martens & Schawaller) (SMNS, MHNG) 4; below Sheduwa, 2100-2550 m, 9.IV.1982 (A. & Z. Smetana) (MHNG) 4.

Distribution. India (West Bengal: Darjeeling district, Uttar Prades: Kumaon, Garhwal), Western, Central and Eastern Nepal.

Baeocera vilis Löbl

Material examined, 68 specimens: Nepal, Myagdi distr., Kali Gandaki Valley, Dana, 20.IX.1971 (Franz) (Coll. H. Franz) 1; Mustang distr., Kali Gandaki Valley, between Ghasa and Lete IX.1971 (Franż) (MHNG) 1; Parbat distr., above Shika near Ghoropani, 26.IX.1971 (Franz) (MHNG) 1; Kathmandu distr., Gokarna forest 1400 m, 31.III.-1.IV.1981 and 20.X.1983 (Löbl & Smetana) (MHNG) 21; Gokarna forest, 3.X.1971 (Franz) (Coll. H. Franz) 1; Bajalu Park, Kathmandu, 1400 m, 17.III.1980 (Martens & Ausobsky) (SMNS) 1; Rani Beni SE Sanogau, 1500-1600 m, 25.IV.1988 (Brachat) (MHNG) 4; Nagarjung, Jamacok, 1400-1600 m, 18.VIII.1983 (Martens & Schawaller) (SMNS) 12; Nagarjung, 1650 m, 2.IV.1981 (Löbl & Smetana) (MHNG) 5; Patan distr., Godawari, 1600 m, 31.III.1984 (Löbl) (MHNG) 1; above Godawari, 1700 m, 19.III.1980 (Martens & Ausobsky) (SMNS, MHNG) 2; Sindhupalcok distr., Burlang Bhanjyang, 2600 m, 5.IV.1981 (Löbl & Smetana) (MHNG) 2; Malemchi Khola bellow Malemchi, 2000 m, 15.IV.1981 (Löbl & Smetana) (MHNG) 1; Zorum River between Durmtali and Korthali, Ting San La, near Barahbise, ca 1900 m, VIII.1980 (Franz) (Coll. H. Franz) 1; Sankhua Sabha distr., below Sheduwa, 2550 m, 30.III.1982 (A. & Z. Smetana) (MHNG) 1; Induwa Khola Valley, 2000 m, 16.IV.1984 (Löbl & Smetana) (MHNG) 1; forest S Mangsingma, 2200 m, 11.IV.1984 (Löbl & Smetana) (MHNG) 2; 2 km E Mangsingma, 1900 m, 19.IV.1984 (Löbl & Smetana) 1; Ilam distr., Gitang Khola Valley, 1750 m, 11.-13.IV.1988 (Martens & Schawaller) (SMNS) 2; Panchtar distr., Paniporua, 2300 m, 16.-20.IV.1980 (Martens & Schawaller) (SMNS) 2; Taplejung distr., ascent to Khebang from Tada Khola, 1500 m, 25.IV.1988 (Martens & Schawaller) (SMNS, MHNG) 3; above Yamputhin, left bank of Kabeli Khola, 1800-2000 m, 27.-29.IV.1988 (Martens & Schawaller (SMNS) 2.

Distribution. India (West Bengal: Darjeeling distr.; Sikkim, Uttar Pradesh: Kumaon), Bhutan, Wertern, Central and Eastern Nepal.

Remarks. Females of *B. vilis* may be readily associated with the males by their elytral punctation, notably by the latero-apical, very finely punctate area extended conspicuously anteriad.

Baeocera pseudovilis Löbl

Material examined, 10 specimens: Nepal, Kaski distr., Tandarakot between Pokhara and Ghoropani Pass, 1000 m, 18.IX.1971 (Franz) (Coll.H.Franz) 1; Parbat distr., above Shika near Ghoropani, 25.IX.1971 (Franz) (MHNG) 1; Ilam distr., Citang Khola Valley, 1750 m, 11.-13.IV.1988 (Marterns & Schawaller) (SMNS) 1; Taplejung distr., Hellok in Tamur Valley, 2000 m, 17.V.1988 (Martens & Schawaller) (MHNG) 1; India, Himachal Pradesh, Khadjiari E Dalhousie, 1950 m, 21.X.1988 (Vit) (MHNG) 4; 10 km NW Sarahan, NW Hahan, 1700 m, 7.X.1988 (Vit) (MHNG) 1; Baroq forest SW Solan, 1500 m, 8.X.1988 (Vit) (MHNG) 1.

Distribution. India (Himachal Pradesh, Uttar Pradesh: Kumaon, West Bengal: Darjeeling distr.), Western and Eastern Nepal.

Baeocera signata Löbl

Material examined, 22 specimens: Nepal, Manang distr., forest W Bagarchap, 2200 m, 24.IX.1983 (Löbl & Smetana) 1; Latha Manang W Bagarchap, 2350 m, 22.IX.1983 (Löbl & Smetana) 1; Parbat distr., Goropani Pass, 2700-2850 m, 5-6.X.1983 (Löbl & Smetana) 5; Kathmandu distr., Gokarna forest, 1400 m, 1.IV.1981 (Löbl & Smetana) 3; Sindhupalcok distr., Chaubas, 2600 m,

5.IV.1981 (Löbl & Smetana) 1; Malemchi, 2800 m, 14.IV.1981 (Löbl & Smetana) 1; Malemchi Khola below Malemchi, 2100 m, 15.IV.1981 (Löbl & Smetana) 1; above Shermathang, 2900 m, 26.IV.1981 (Löbl & Smetana) 1; Pokhare NE Barahbise, 2700 m, 2.V.1981 (Löbl & Smetana) 3; Sankhua Sabha distr., forest S Mangsingma, 2200 m, 19.IV.1984 (Löbl & Smetana) 4; 2 km E Mangsingma, 1900 m, 19.IV.1984 (Löbl & Smetana) 1 (all MHNG).

Distribution. India (West Bengal: Darjeeling distr.), Western, Central and Eastern Nepal.

Baeocera microptera Löbl

Material examined, 93 specimens: Nepal, Mustang distr., between Ghasa and Lete, 25.IX.1971, (Franz) (Coll.H.Franz, MHNG) 6; Mishi N Ghasa, Kali Gandaki Valley, 21.IV.1971 (Franz) (Coll. H. Franz) 1; Manang distr., Latha Manang W Bagarchap, 2400 m, 23.IX.1983 (Löbl & Smetana) (MHNG) 3; Gorka distr., Buri Gandaki, Nyak, 2270-2450 m, 1.VIII.1983 (Martens & Schawaller) (SMNS, MHNG) 5; Solukhumbu distr., Dugdima near Lughla via Blasda Pass, ca 4000 m, 4.X.1975 (Franz) (MHNG) 1; S Lughla, between Shutje and Bhum, ca 2200 m, 7.X.1975 (Franz) (Coll. H. Franz) 1; ravine near Shutje, S. Lughla, 7.X.1975 (Franz) (Coll. H. Franz, MHNG) 2; Sankhua Sabha distr., Arun Valley, betw. Mure and Hurure, 2050-2150 m, 17.VI.1988 (Martens & Schawaller) (SMNS) 1; pass NE Mangmaya, 2300 m, 6.IV.1984 (Löbl & Smetana) (MHNG) 1; Ilam distr., Mai Pokhari, 2100-2200 m, 25.-27.III.1980 (Martens & Ausobsky) (SMNS) 2; India, Uttar Pradesh, Joshimat, Pulna, 4.VIII.1989 (Riedel) (SMNS) 5; Himachal Pradesh, Baroq forest SW Solan, 1500 m, 8.X.1988 (Vit) (MHNG) 4; Kulu Valley, Chijoga S Manali, 1900 m, 12.X.1988 (Vit) (MHNG) 2; Kulu Valley, Vashisht Baths N Manali, 1900 m, 13.X.1988 (Vit) (MHNG) 5; Kulu Valley, Naggar 1850 m, 16.X.88 (Vit) (MHNG) 43; Dalhousie, 1950 m, 20.X.1988 (Vit) (MHNG) 7; Katalope Sanct. E Dalhousie, 2400 m, 22.X.1988 (Vit) (MHNG) 4; Jutogh, 10 km W Simla, 2000 m, 29.X.1988 (Vit) (MHNG) 2.

Distribution. Pakistan, India (Himachal Pradesh, Uttar Pradesh: Kumaon and Garhwal), Western and Eastern Nepal.

Remarks. This species has reduced wings and cannot fly, which is surprising in the light of its wide distribution. It occurs in conniferous and broad-leaved forests. The specimen found at Dugdima at 4000 m altitude represents the highest record for the genus.

Baeocera ventralis (Löbl)

Material examined, 152 specimens: Nepal, Kaski distr., Pokhara City, 820 m, 15-18.VI.1976 (Wittmer & Baroni Urbani) (NMB) 1; Khorkore near Pokhara, 26.IX.1977 (Franz) (Coll. H. Franz) 1; Tandarakot, trail Pokhara - Ghoropani, ca 1000 m, 18.IX.1971 (Franz) (Coll. H. Franz) 1; hill above Bennas near Pokhara, 20.IX.1978 (Franz) (Coll. H. Franz) 5; Gorkha distr., Arughat Suteo, 600-700 m, 27.VII.1983 (Martens & Schawaller) (SMNS) 2; Buri Gandaki, Suteo - Labubesi, 700 - 1000 m, 29.VII.1983 (Martens & Schawaller) (SMNS) 3; Darondi Khola between Doreni and Motar, 900-750 m, 13.VIII.1983 (Martens & Schawaller) (SMNS) 3; near Bimal Nagar, Terai, 500 m, 28.IX.1977 (Franz) (Coll. H. Franz) 4; Dhading distr., Ankhu Khola Valley, Ankhu Sangu, 650 m, 24-25.VII.1983 (Martens & Schawaller) (SMNS) 1; Buri Gandaki facing Pangshing, 1750 m, 31.VII.1983 (Martens & Schawaller) 1; Chitawan distr., Royal Chitawan National Park, 9.X.1980 (Franz) (Coll. H. Franz) 10; Parsa dist., Terai, Amlekganj 7-10.X.1972 (Franz) (Coll.H.Franz) 2; near Amlekganj, Khingar, Siwalik, 660 m, 18.X.1977 (Deharveng) (MHNG) 26; Kathmandu distr., Nagarjung, Jamacok, 1400-1600 m, 18.VIII.1983 (Martens & Schawaller) (SMNS) 1; Patan distr., Caukel Dara, near Bajrajogini, 1600-1700 m, 23.IV.1988 (Brachat) (MHNG) 2; Phulcoki near Dalikhel, ca 1900 m, 21.IV.1977 (Franz) (H. Franz) 4; Sindhupalcok distr., 3 km N Bahunepati, 900 m, 28.IV.1981 (Löbl & Smetana) (MHNG) 1; above Barahbise, 1550 m, 6.VIII.1970 (Franz) (Coll. H. Franz) 1; Sankhua Sabha distr., Lamobagar Gac, 1400 m, 28-30.V.1980 (Wittmer) (NMB) 1;

bottom Arun Valley below Num, 1100 m, 21.IV.1984 (Löbl & Smetana) (MHNG) 1; Ilam distr., Sanishare, 5 km N, feet of Siwalik Mts, 270-300 m, 3-5.IV.1988 (Martens & Schawaller) (SMNS) 7 ; Taplejung distr., Kabeli Khola below Limbudin, 900 m, 1.IX.1983 (Martens & Daams) (SMNS) 2; confluence of Kabeli Khola and Taka Khola, 1000-1050 m, 23-25.IV.1988 (Martens & Schawaller) (SMNS, MHNG) 72.

Distribution. Pakistan, India (Himachal Pradesh, Uttar Pradesh: Garhwal and Kumaon, West Bengal: Darjeeling district, Assam, Meghalaya), Western, Central and Eastern Nepal, Bhutan, Thailand.

Baeocera khasiana Löbl

Material examined, 8 specimens: Nepal, Ilam distr., Mai Pokhari, 2100-2200 m, 9-10.IV.1988 (Martens & Schawaller) (SMNS) 1; Panchthar distr., Paniporua, 2300 m, 16.-20.IV.1988 (Martens & Schawaller) (SMNS, MHNG) 2; Taplejung distr., Omje Kharka NW Yamputhin, 2300-2500 m, 1-6.V.1988 (Martens & Schawaller) (SMNS) 1; Sankhua Sabha distr., above Tashigaon, 3100 m, 7.IV.1982 (A. & Z. Smetana) (MHNG) 2; Sindhupalcok distr., Malemchi, 2900 m, 14.IV.1981 (Löbl & Smetana) (MHNG) 1, Patan distr., Phulcoki,, 2300 m, 10.V.1981 (LöBl) (MHNG) 1.

Distribution. India (Meghalaya), Eastern and Central Nepal, Thailand.

Remarks. Only females were found in Thailand. Their identity has to be confirmed.

Baeocera excelsa Löbl

Material examined, 1 specimen: Nepal, Sankhua Sabha distr.,Arun Valley, between Mure and Hurure, 2050-2150 m, 9-17.VI.1988 (Martens & Schawaller) (SMNS).

Distribution. India (Uttar Pradesh: Kumaon), Eastern Nepal.

Baeocera callida Löbl

Material examined, 66 specimens: Nepal, Sankhua Sabha distr., Arun Valley bottom, below Num, 1050-1100 m, 20. and 21.IV.1984 (Löbl & Smetana) (MHNG) 24; below Sheduwa, 2550 m, 30.III.1982 (A. & Z., Smetana) (MHNG) 2; Taplejung distr., confluence of Kabeli Khola and Tada Khola, 1000-1050 m, 23-25.IV.1988 (Martens & Schawaller) (SMNS) 4; Kathmandu distr., Gokarna forest, 1400 m, 1.IV.1981 (Löbl & Smetana) (MHNG) 1; Kaski distr., Tandarakot between Pokhara and Ghoropani Pass, ca 1000 m, 18.IX.1971 (Franz) (Coll. H. Franz) 1; India, Uttar Pradesh, Mussoorie, Rabit Farm, 1300 m, 10.VII.1989 (Riedel) (SMNS) 1; Himachal Pradesh, Jutogh 10 km W Simla, 2000 m, 29.X.1988 (Vit) (MHNG) 7; Kulu Valley, Chijoga S Manali, 1900 m, 12.X.1988 (Vit) (MHNG) 1; Kulu Valley, Naggar, 1850 m, 16.X.1988 (Vit) (MHNG) 7; Kulu Valley, Vashisht Baths N Manali, 1900 m, 13.X.1988 (Vit) (MHNG) 1, Baroq forest 4 km SW Solan, 1500 m, 8.X.1988 (Vit) (MHNG) 17.

Distribution. Eastern, Central and Western Nepal, India (Uttar Pradesh: Kumaon and Garhwal, Himachal Pradesh), Pakistan.

Remarks. The records from Pakistan and Garhwal are based on females and are therefore not very reliable (LÖBL, 1986b). However, the new findings support previous identification.

Baeocera monstrosa (Löbl)

Material examined, 3 specimens: India, Himachal Pradesh, 12 km E Mandi, 750 m, 25.X.1988 (Vit) (MHNG).

Distribution. Sri Lanka, India (Kerala, Tamil Nadu, Uttar Pradesh: Kumaon, Himachal Pradesh).

Baeocera hamifera Löbl

Material examined, 34 specimens: Nepal, Mustang distr., 2 km N Kalopani, 2500 m, 1.X.1983 (Löbl & Smetana) (MHNG) 3; Lete, 2550 m, 2.X.1983 (Löbl & Smetana) (MHNG) 2; N Lete, 24.IX.1971 (Franz) (Coll. H. Franz) 1; Tangsang near Tukche, Takola, ca 3000 m, 23. IX.1971 (Franz) (Coll. H. Franz) 1; Manang distr., Marsyandi, Thanjok-Chame 2250 m, 17.IV.1980 (Martens & Ausobsky) (SMNS) 1; Kathmandu distr., Nagarjung, Jamacok, 1400-1600 m, 18.VIII.1983 (Martens & Schawaller) (SMNS) 1; Patan distr., Phulcoki, 2300, 2500 and 2700 m, 10.V.1981, 16.X.1983, and 28-29.IV.1984 (Löbl & Smetana) (MHNG) 6; Sindhupalcok distr., Malemchi Khola below Malenchi, 2100 m, 15.IV.1981 (Löbl & Smetana) (MHNG) 1; Malemchi, 2800 m, Malemchi, 2800 m, 14.IV.1981 (Löbl & Smetana) (MHNG) 1; Pokhare NE Barahbise, 2700 and 2800 m, 2. and 7.V.1981 (Löbl & Smetana) (MHNG) 4; Sankhua Sabha distr., below Sheduwa, 2100-2500 m, 9.IV.1982 (A. & Z. Smetana) (MHNG) 3; Induwa Khola Valley, 2100m, 17.IV. 1984 (Löbl & Smetana) (MHNG) 1; Panchthar distr., between Paniporua and Hinwa Khola Valley, 2300 -1850 m, 20.IV.1988 (Martens & Schawaller) (SMNS) 2; Taplejung distr., Worebung Pass, 2000 m, 21.IV.1988 (Martens & Schawaller) (SMNS) 4; Hellok in Tamur Valley, 2000 m, 17.V.1988 (Martens & Schawaller) (SMNS) 1; upper Tamur Valley, resthut side of the valley, 2450 m, 19.V.1988 (Martens & Schawaller) (SMNS) 2.

Distribution. India (West Bengal: Darjeeling distr.), Western, Central and Eastern Nepal.

Baeocera pubiventris Löbl

Material examined, 5 specimens: Nepal, Sankhua Sabha distr., bottom Arun Valley below Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG) 2; India, Himachal Pradesh, 12 km E Mandi, 25.X.88 (Vit) (MHNG) 3.

Distribution. Thailand, Eastern Nepal, India (Himachal Pradesh).

New species

Baeocera sordidoides sp. n.

Holotype, male: Nepal, Patan distr., Phulcoki, 2700 m, 16.X.83 (Löbl & Smetana) (MHNG).

Paratypes, 19: as holotype but 15.X.1983, 1 male; Patan distr., Phulcoki, 2500 m, 28.-29.IV.1984, 1 male, 2 females and at 2600 m, 14.X.1983 (Löbl & Smetana) 1 female (MHNG); 2 km S Godawari, 1700 m, 19.X.1983 (Löbl & Smetana) (MHNG) 1 female; Kathmandu distr. Shewapuri, 2100 - 2300 m, 25.VI.1988 (Martens & Schawaller) (SMNS) 1 male; same but 2400 m, 3.IV.1985 (Smetana) (MHNG) 1 male Sindhupalcok distr., Chaubas, 2600 m, 5.IV.1981 (Löbl & Smetana) (MHNG) 1 male, 2 females; Malemchi, 2800 m, 14.IV.1981 (Löbl & Smetana) 1 female; Manang distr., forest W. Bagarchap, 2200 m, 21:IX.1983 (Löbl & Smetana) (MHNG) 1 male, 1 female; Mustang distr., Taksang, Tukche, IX.-X.1971 (Franz) (Coll. H. Franz) 1 male; Parbat distr., Ghoropani Pass, N slope, 2750 m, 5.X.1983 (Löbl & Smetana) (MHNG) 1 male, 1 female; India, Uttar pradesh, Joshimat, Pulna, 2300 m, 4.VIII.1989 (Riedel) (SMNS) 1 male, 1 female; Mussoorie, Rabit Farm, 1300 m, 10.VII.1989 (Riedel) (SMNS) 1 female.

Diagnosis. Medium-sized species with slender aedeagus and symmetrical median lobe, similar to that of species of *brevicornis* group; internal sac with two elongate

curved sclerites; median lobe bilobed between ventral process and base of apical portion. Body, metasternum excepted, very finely punctate. Metacoxae approximate.

D e s c r i p t i o n . Length 1.40 - 1.55 mm, width 0.88 - 1.0 mm. Strongly convex, especially ventrally, body, femora and tibiae more or less dark brown, antennae and tarsi paler. Eyes large. Antennae moderately long, relative length of segments as follows: III 11, IV 12, V 16, VI 14, VII 18, VIII 12, IX 19, X 17, XI 21 (holotype). Segments III to VI evenly wide, V about 4 x as longe as wide; VII 3x as long as wide; VIII about 2.5x as long as wide; IX to XI each much wider than VII, XI almost 2 x as long as wide. Pronotum with rounded lateral margins except near base; lateral keels not visible in dorsal view; punctation very fine, usually barely visible at magnification 50x. Tip of scutellum exposed. Elytra rather narrowed apically; lateral keel not visible in dorsal view and lateral margin feebly rounded; sutural area flat, very finely punctate; discal punctation sparse and very fine, punctures very shallow, but much larger than those on pronotum, often barely visible at magnification 24x; sutural stria deep, complete, extended along basal margin, forming basal stria joined with lateral stria. Wings fully developed. Pygidium extremely finely punctate and microsculptured. Hypomeron and mesepisternum impunctate. Mesepimeral ridge about twice as long as interval between its end and mesocoxa. Mesosternum with convex centre; middle impunctate area rather large, limited laterally by finely and very densely punctate areas. Lateral portion of metasternum smooth near metacoxa, elsewhere more or less coarsely punctate, punctures often elongate. Mesocoxal area 0.04 - 0.05 mm long, with coarse marginal punctures. Metepisternum 0.04 - 0.06 mm wide, not or barely narrowed anteriad, with deep, straight, punctate suture. Metacoxae relatively approximate. First ventrite with mediobasal hump; without microsculpture and very finely punctate; basal punctures coarse, not elongate. Protibiae straight, meso- and metatibiae somewhat curved. Segments 1 to 3 of protarsi moderately enlarged in male. Aedeagus (Figs 97,98) 0.48 - 0.52 mm long. Median lobe with long, tapering apical portion and bisinuate strongly sclerotized ventral wall beyond level of ventral process. Parameres uniformly wide, hardly curved. Internal sac with strongly curved basal sclerite.

R e m a r k s . This new species resembles *B. sordida* Löbl from Japan. Both species share most of the significant characters, including the relatively approximate metacoxae, which distinguish them from the membres of the *brevicornis* group. The aedeagi of *B. sordida* and *B. sordidoides* are similar, that of *B. sordidoides* differs in the median lobe bearing a bilobed process situated between the ventral process and the base of the narrowed apical portion. *Baeocera inermis* Löbl and *B. laminula* sp.n. described below are also difficult to separate from *B. sordida/sordidoides* by their external characters. Only the male genitalia provide positive diagnostic characters.

Most specimens of *B. sordidoides* were found in oak and mixed broad-leaved forests in Central and Western Nepal.

Baeocera laminula sp.n.

Holotype, male: Nepal, Manang distr.,forest W Bagarchap, 2200 m, 21.IX.83 (Löbl & Smetana) (MHNG).

Paratypes, 4: as holotype 1 male, 1 female; Parbat distr., Ghoropani Pass., N slope, 2750 m, 5.X.1983 (Löbl & Smetana) 1 male; Patan distr., Phulcoki, 2600 m, 20.IV.1982 (A. & Z. Smetana) 1 male (all MHNG).

D i a g n o s i s . Medium-sized species with symmetrical, rather wide aedeagus. Parameres almost straight in dorsal view, sinuate in lateral view. Internal sac with large basal vesicular portion bearing very fine spines, and distal portion with asymmetrical and

flat median sclerite and two slender lateral sclerites. Body, metasternum excepted, very finely punctate. Metacoxae approximate.

D e s c r i p t i o n . Length 1.50 - 1.65 mm, width 0.96 - 1.07 mm. Body dark reddish-brown to blackish. Most external characters as in B.sordidoides, antennae longer, with ratio of segments as follows: III 15, IV 15, V 17, VI 15, VII 18, VIII 15, IX 20, X 19, XI 22 (holotype). Elytral punctation still finer than in *B. sordidoides*, anterior portion of sutural stria accompanied by several distinct punctures. Smooth latero-apical area of metasternum larger, metepisternal suture deeper and wider, with coarser punctures. Aedeagus (Figs 99, 100) 0.55 - 0.60 mm. Median lobe with fairly short apical portion. Internal sac with apical, irregularly margined lamina joined with two slender sclerites.

R e m a r k s . This species may be distinguished from *B. sordida/sordidoides* and from *B. inermis* by the shape of the median lobe and by the internal sac. Several females from other localities than those of the males, or slightly differing by their external characters, are not certainly conspecific with the males of *B. laminula* and therefore are not included in the type series.

Baeocera reducta sp. n.

Holotype, male: Nepal, Kaski distr., above Dumbus, 2100 m, 8-10.V.1980 (Martens & Ausobsky) (SMNS).

Paratypes, 4 females: as holotype (SMNS, MNHG).

D i a g n o s i s . Micropterous member of the lenta group, with very short sutural striae of elytra, impunctate hypomeron, entire elytral surface coarsely punctate, parameres moderately sinuate and wide distal sclerite of internal sac of aedeagus.

D e s c r i p t i o n . Length 1.15 - 1.30 mm, width 0.78 - 087 mm. Body strongly convex, pale reddish-brown, antennae and tarsi yellowish. Eyes moderately large. Antennae long, relative length of segments as follows: III 12, IV 13, V 15, VI 12, VII 16, VIII 14, IX 19, X 18, XI 20 (holotype). Segments III to VI slender, V somewhat wider than IV or VI; VII about 3x as long as wide, VIII 3.5 x as long as wide. Pronotum with rounded lateral margins; lateral keels not visible in dorsal view; punctation very fine, well delimited, visible at 24x magnification. Scutellum covered by pronotal lobe. Elytra rather strongly narrowed apically, with rounded lateral margins; lateral keel not visible in dorsal view; sutural area not or barely raised; sutural stria very shallow, distinct only in apical portion, evanescent on anterior half of sutural length. Entire punctation coarse and dense (including on humeral area), punctures near apex somewhat smaller and closer than those on centre. Wings strongly reduced. Pygidium very finely punctate. Hypomeron impunctate. Mesepisternum with several more or less distinct punctures. Entire metasternum coarsely punctate; punctures large, less dense laterally than on centre. Mesocoxal area very narrow. Mesepisternum not distinct. First ventrite coarsely punctate except on small smooth lateral area. Basal punctures not elongate. Pro- and mesotibiae straight, metatibiae somewhat curved. Segments 1 to 3 of protarsi somewhat enlarged in male. Aedeagus (Figs 101,102) 0.36 mm long. Median lobe with relatively large basal bulb and very short apical portion. Parameres very weakly sinuate.

R e m a r k s . This species shares with *B. hygrophila* Löbl most of the external and aedeagal characters. It may be distinguished from *B. hygrophila* in the much paler coloration of the body, the shorter sutural striae of the elytra, the reduced wings, the punctate mesepisternum and in the shape of the sclerites of the internal sac of the aedeagus. All specimens of *B. reducta* were found in a moist *Sarauja napaulensis* forest in western Nepal.

Baeocera crinita sp. n.

Holotype, male: Nepal, Sankhua Sabha distr., range S Mangsingma, 2800 m, 7.IV.1984, (Löbl & Smetana) (MHNG).

Paratypes, 26: Sankhua Sabha distr., as holotype 1 female; "Bakan" W of Tashigaon, 3200m, 5.IV.1982 (A. & Z. Smetana) (MHNG) 1 female; Thudam, 3550-3650 m, 25.-27.V.1988 (Martens & Schawaller) (SMNS, MHNG) 4 males, 5 females; above Pahakhola, 2600-2800 m, 3.VI.1988 (Martens & Schawaller) (SMNS, MHNG) 1 male, 14 females.

D i a g n o s i s . Small-sized micropterous member of the *lenta* group characterized by very short antennae with wide segments VII to XI, very short sutural striae of elytra and distinctly microscultured 1st ventrite.

D e s c r i p t i o n . Length 1.0 - 1.1 mm, width 0.60 - 0.73 mm. Body moderately convex, dark reddish-brown. Antennae, tarsi and apex of abdomen paler. Eyes small. Antennae very short, relative length of segments as follows: III 8, IV 6, V 8, VI 6, VII 8, VIII 6, IX 9, X 10, XI 12 (holotype). Segments III and V somewhat wider than IV, VI notably wider than V; VII to XI each conspicuously wide, not or somewhat longer than wide. Dorsal punctation dense and fine, distinct at 24x magnification, that of pronotum somewhat finer than that of elytra. Pronotal and elytral keels not visible in dorsal view. Scutellum covered by pronotal lobe. Elytra rather strongly narrowed apically; sutural area usually somewhat raised, except anteriorly; sutural stria unsually short, visible only along apical half of sutural margin. Wings almost completely atrophied. Hypomeron and metepisternum impunctate. Mesepimeral ridge about 2x longer than interval between its end and mesocoxa. Middle portion of metasternum convex, entirely densely and rather finely punctate. Punctation of lateral portion of metasternum coarser and less dense than that of centre. Mesocoxal area very narrow. Metepisternum flat, 0.02 - 0.04 mm wide, with suture indicated by row of coarse punctures. Abdomen microsculptured. Pygidium extremely finely punctate. First ventrite with middle portion densely and rather finely punctate, laterally almost impunctate, basal punctures coarse. Tibiae straight. Segments 1 to 3 of male pro- and mesotarsi somewhat enlarged. Aedeagus (Figs 103-105) 0.29 - 034 mm long. Median lobe slender, its ventro-apical portion tapering. Parameres weakly sinuate.

R e m a r k s . This species seems to be related to *B. microps* Löbl which has a similar shape of the body, reduces eyes and wings, short antennae with wide segments VII to XI, and a similar aedeagus. It may be distinguished by the shorter sutural striae of the elytra, the impunctate lateral portion of the 1st ventrite, and by the darker and somewhat larger body. *Baeocera crinita* and *B. microps* are possibly vicarious and are restricted to small areas in Eastern Nepal and in Western Bengal, respectively. *Baeocera microps* has been found only in evergreen oak forest. The vertical range of *B. crinita* extends from the oak to the *Betula/Rhododendron* zone.

Baeocera cribrata sp. n.

Holotype male: Nepal, Panthar distr., Paniporua, 2300 m, 16 - 20.IV. 1888 (Martens & Schawaller) (SMNS).

Paratypes, 7: as holotype (SMNS, MHNG) 1 male, 1 female; Nepal, Sankhua Sabha distr., Chichila above Ahale, 2300 m, 26.III.1982 (A. & Z. Smetana) (MHNG) 1 male; NE Kuwapani, 2250 m, 24.IV.1984 (Löbl & Smetana) (MHNG) 1 male; forest S Mangsingma, 2200 m, 11-13.IV.1984 (Löbl & Smetana) (MHNG) 1 female; Nuwakot distr., Dinguari Kola above Trisuli Bazar, IX.-X.1971 (Franz) (Coll. H. Franz) 2 males.

D i a g n o s i s . Brachypterous member of the *lenta* group with conspicuously coarsely punctate pronotum and coarsely punctate mesepisternum and hypomeron. Sutural stria of elytron very short. Aedeagus with relatively long median lobe and long sclerites of internal sac.

D e s c r i p t i o n . Length 1.15 - 1.30 mm, width 0.78 - 0.90 mm. Body reddish-brown, antennae and tarsi paler. Eyes small. Antennae of average length, with slender segments III to VI; relative length of segments in holotype as follows: III 13, IV 11, V 14; VI 13, VII 16, VIII 14, IX 17, X 16, XI 18. Segment VII about 3x as long as wide, VIII about 3.5x as long as wide. Pronotum with rounded lateral margins, lateral keels not visible in dorsal view; entire punctation very dense and coarse, that of centre distinct at 12x magnification , near lateral margin still coarser, with punctures larger than intervals. Scutellum barely exposed or completely covered by pronotal lobe. Elytra strongly convex, apically narrowed; lateral keel not visible in dorsal view; sutural stria very short, distinct only in apical half of sutural length ; sutural area flat; whole discal surface densely and very coarsely punctate, punctures about as large as those of lateral portion of pronotum. Wings reduced, not functional. Pygidium very finely punctate. Entire hypomeron coarsely punctate. Mesepimeral ridge about 2x longer than interval between its end and mesocoxa. Mesepisternum with numerous coarse punctures. Metasternum with smooth, convex centre; punctation around smooth area and near metacoxa very dense and coarse, elsewhere less dense but still coarser. Mesocoxal area very narrow. Metepisternum indistinct. Entire first ventrite without visible microsculpture (100x), densely and coarsely punctate. Basal punctures not elongate. Pro- and mesotibia straight, metatibia somewhat curved. Segments 1 to 3 of male protarsus somewhat enlarged. Aedeagus (Figs 106-108) 0.37 - 0.39 mm long. Median lobe with long basal bulb and very short apical portion. Parameres hardly sinuate.

R e m a r k s . *Baeocera cribrata* is possibly closely related to *B. puncticollis* with which it shares a similar aedeagus, the strongly shortened sutural striae and the punctate hypomeron. It may be easily separated from the latter by the much more coarsely punctate pronotum and by the punctate mesepisterna. The species is brachypterous. It occurs in mixed broad-leaved forest in Central and Eastern Nepal.

Baeocera martensi sp. n.

Holotype, male: Nepal, Sankhua Sabha distr., Arun Valley below Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG).

Paratypes, 20: Sankhua Sabha distr., as holotype (MHNG) 5 males, 6 females; Arun Valley bottom betw. Hedanga and Num, 950-1000 m, 6-8.VI.1988 (Martens & Schawaller) (SMNS, MHNG) 3 males, 6 females.

D i a g n o s i s . Member of the *lenta* group with distal portion of ejaculatory duct accompagnied by a bunch of moderately sclerotized denticles; parameres weekly sinuate; pronotum distinctly punctate; whole elytral disc coarsely punctate.

D e s c r i p t i o n . Length 1.0 - 1.2 mm, width 0.64 - 0.78 mm. Body more or less dark reddish brown, tarsi and antennae paler. Eyes moderately large. Antennae with narrow segments III to VI, similar to those in related species. Pronotum with rounded margins, lateral keels not visible in dorsal view, punctation rather fine, barely visible at 12x magnification, distinct at magnification 24x. Scutellum covered by pronotal lobe. Elytra narrowed apically, with sutural area raised in most specimens; sutural stria complete, extended along basal margin and joined with lateral margin; lateral keel not

visible in dorsal view; punctation entirely coarse and dense, apical area finer punctate than remaining surface; most punctures distinctly larger than intervals between them. Wings apparently fully developed. Pygidium very finely punctate. Ventral surface similar as in related species. Hypomeron and mesepisternum impunctate; metasternum and 1st ventrite coarsely punctate, small smooth central area of metasternum excepted; mesocoxal area very narrow, visible portion of metepisternum narrow but distinct. Segments 1 to 3 of male protarsus moderately enlarged. Aedeagus (Figs 109 to 111) 0.29 - 0.33 mm long. Median lobe with large basal bulb and short apical portion. Parameres very weakly sinuate. Internal sac with a bunch of denticles.

R e m a r k s . This species is closely related with *B. pigra*, *B. vidua* and *B. wittmeri*; all share similar shape of the aedeagus, and the conspicuous sclerotized denticles along the ejaculatory duct, situated apically of the sclerotized pieces of the internal sac. These four species may be distinguished by the shape of the parameres, which are straight and evenly very narrow in *B. vidua*, curved and distally narrowed in *B. pigra*, and conspicuously long in *B. wittmeri*. *Baeocera martensi* may be readily distinguished from these three species by the much coarser pronotal punctation. All specimens of *B. martensi* were found in subtropical forests in Eastern Nepal.

Baeocera schawalleri sp. n.

Holotype, male: Nepal, Taplejung distr., Hellok in Tamur Valley, 2000 m, 17.V.1988 (Martens & Schawaller) (SMNS).

D i a g n o s i s . Medium-sized species with aedeagus having very large bulbous portion of median lobe, distal portion of median lobe asymmetrical, with two unequal, narrow sclerotized dorsal lobes and one wider ventral piece; parameres symmetrical, slender und simple; internal sac complex, without flagellum. Basal stria of elytron interrupted. Thoracal and abdominal punctation very fine or absent, punctation on elytra and metasternum coarse. Base of 1st ventrite with row of longitudinal furrows.

D e s c r i p t i o n . Length 1.5 mm, width 1.0 mm. Body moderately convex dorsally, very dark reddish-brown to blackish, apex of abdomen and legs paler, antennae ochreous. Eyes large. Antennae with elongate segments III to VI; relative length of antennal segments as follows: III 11, IV 12, V 16, VI 15, VII 16, VIII 13, X 15, XI 25. Segment V 4x as long as wide, as wide as III or VI, somewhat wider than IV; VII about 2.5x as long as wide, distinctly wider than VI, barely wider than VIII; VIII about 2x as long as wide; IX to XI notably wider than VII, XI 2.5x as long as wide. Pronotum with regularly rounded lateral margins: lateral keels not visible in dorsal view; punctation very fine and shallow, visible at 50x magnification. Distal portion of scutellum exposed. Elytra narrowed apically, lateral keels visible near base in dorsal view; sutural area flat, with row of distinct punctures; sutural stria deep, curved near base and extended along basal margin to humeral area, separated from lateral stria by narrow space; lateral stria very densely punctate; discal punctation coarse and dense; in basal half most punctures about as large as intervales, in apical half punctation less dense, most punctures smaller than intervales. Punctation of pygidium very fine, but well visible compared to that of pronotum. Hypomeron and mesepisternum impunctate. Mesepimeral ridge almost 3x as long as interval between its end and mesocoxa. Metasternum with smooth, rather flat centre, elsewhere coarsely punctate; punctures on lateral portion of metasternum not or weakly elongate, smaller and denser near metacoxa than those on anterior portion. Mesocoxal area very narrow, with coarse, not elongate marginal punctures extended laterally along anterior metasternal margin about to level of centre of mesepimeral ridge. Metepisternum

somewhat vaulted, at widest point 0.09 mm, narrowed anteriad, its suture deep, punctate, somewhat rounded near anterior and posterior angles. Ventrites very finely punctate, without microsculpture. First ventrite with basal row of deep, up to 0.05 mm long furrows. Tibia straight. Segments 1 to 3 of male protarsus enlarged, mesotarsus with segment 1 enlarged. Aedeagus (Figs 112, 113) 0.58 mm long. Median lobe apically asymmetrical, at tip truncate, with two slender dorso-apical lobes. Internal sac bearing numerous spines and denticles, and several teeth-like sclerites. Parameres becoming slender apically and curved near tip.

R e m a r k s . *Baeocera schawalleri* shares essential diagnosic characters with *B. insolita* Löbl. It may be recognised in having asymmetrical distal portion of the median lobe and coarsely punctate metasternum.

The new species was found in a forest remnant with bushes in Eastern Nepal. The wings of the unique specimen were not examined. They are likely fully developed, as in the other dark-coloured species.

Baeocera mustangensis sp. n.

Holotype male: Nepal, Mustang distr., Lete, 2550m, 2.X.1983 (Löbl & Smetana) (MHNG).

Paratypes, 5: as holotype (MHNG) 1 male and Lete, 1971 (Franz) (Coll. H. Franz) 1 male; Mustang distr., 2 km N Kalopani, 2550 m, 1.X.1983 (Löbl & Smetana) (MHNG) 1 male, 1 female; S Lete, 2450-2600 m, 30.IV.- 1.V.1980 (Martens & Ausobsky) (SMNS) 1 male.

D i a g n o s i s . Large species of the *curtula* group with distal portion of median lobe notched ventrally and bearing a bidentate lamina; parameres sinuate in lateral view, narrowed subapically; distal sclerotized portion of ejaculatory duct slender, basal sclerite of internal sac tooth-like, almost symmetrical.

D e s c r i p t i o n . Length 2.0 - 2.2 mm, width 1.25 - 1.50 mm. Body as in *B. hamifera*, rather strongly convex, very dark reddish-brown to black. Apex of abdomen, femora and tibiae more of less dark reddish, tarsi and antennae paler. Pronotum, elytra and pygidium not microsculptured. Eyes rather large. Antennae as in related species. Pronotal centre rather coarsely and very densely punctate, with punctures not well delimited and about as large as intervales, distinct at 12x magnification. Lateral and apical portions of pronotum decidedly finer punctate than centre. Distal portion of scutellum exposed. Elytron with deep, uninterrupted basal stria joined with lateral stria; elytral punctation coarse and dense, much coarser than that on pronotal centre, with many punctures about as large as intervales; punctation on apical portion less coarse than that on middle. Wings fully developed. Pygidium very finely punctate. Mesepimeral ridge longer than interval between its end and mesocoxa. Metasternum with two rows of coarse setiferous punctures joined by medio-basal transverse row of coarse punctures. Mesocoxal area 0.05-0.07 mm long, margined by coarse punctures extended laterally to mesepimeral ridge. Metepisternum flat, 0.11 - 0.13 mm wide, with straight, punctate suture. Lateral portion of metasternum and 1st ventrite almost impunctate. Basal punctures of 1st ventrite coarse. Pro- and mesotibiae straight, metatibiae somewhat curved. Male protarsus with lst segment very large, wider than apex of tibia, 2nd segment about as large, 3rd narrower than apex of tibia. Male mesotarsus with 1st segment almost as wide as apex of mesotibia, 2nd segment notably narrower. Aedeagus (Figs 114,115) 0.88 - 1.0 mm long. Median lobe gradually tapering in dorsal view, with asymmetricaly shaped apical portion in lateral view. Extruded portion of flagellum very long, parts of armature of internal sac strongly sclerotized.

R e m a r k s . This species has been collected in a *Taxus* and broad-leaved forest in the Kali Gandaki Valley in Western Nepal. Wider distribution might be expected as it has

fully developed wings. It differs from *B. hamifera* significantly in the shape of the aedeagus. It may be distinguished from other Old World species of the group also in the pronotal and elytral punctation, in combination with the size of the body.

Baeocera thoracica sp. n.

Holotype, male: Nepal, Mustang distr., Lete, 2550 m, 2.X.1983 (Smetana & Löbl) (MHNG).

Paratypes, 7: as holotype, 1 male; Parbat distr., Ghoropani Pass, 2700 m, 6.X.1983 (Löbl & Smetana) 1 male; Pun Hill at Ghoropani Pass, 3050-3100 m, 8.X.1983 (Löbl & Smetana) 1 male; Sindhupalcok distr., Malemchi, 2800 m, 14. and 17.IV.1981 (Löbl & Smetana) 1 male, 2 females (all MHNG); India, Himachal Pradesh, Simla, Kufri, 16.VII.1989 (Riedel) (SMNS) 1 male.

D i a g n o s i s . Member of the *satana* group. Distal portion of median lobe of aedeagus sinuate, with dorsally notched, not widened apex. Parameres sinuate, without abruptly notched or enlarged areas. Male metasternum simple, metatibia in male with subbasal tooth. Elytra dark reddish brown, in male darker than pronotum, in female paler than pronotum.

D e s c r i p t i o n . Very similar to *B. monstrosetibialis* and *B. dentipes*. Length 1.65 - 1.85 mm, width 1.16 - 1.27 mm. Elytra more or less dark reddish-brown in both sexes, thorax and abdomen ochreous in male, blackish in female. Tarsi and antennae usually somewhat paler than tibiae. Relative lenght of antennal segments as follows: III 14, IV 18, V 20, VI 20, VII 24, VIII 21, IX 25, X 24, XI 32 (holotype); VII and VIII equally wide, VII about 3.5x as long as wide, VIII 3x as long as wide, XI almost 3x as long as wide. Sutural striae almost parallel, sutural area flat. Humeral hump small. Punctures on elytral disc usually smaller than or as large as intervales. Mesepimeral ridge 2 - 2.5x longer than interval between its end and mesocoxa. Middle portion of metasternum convex, densely and rather coarsely punctate laterally of smooth centre and with several additional coarse punctures near medio-apical process. Lateral portion of metasternum very finely punctate. Mesocoxal area 0.03 - 0.04 mm long, marginal punctures not elongate, extended laterally to level of mesepimeral ridge. Metepisternum vaulted, at widest point almost 0.10 mm, anteriad narrowed, its impunctate suture sinuate, very deep. Basal punctures of 1st ventrite elongate. Male with segments 1 and 2 of protarsus strongly enlarged, 1 almost as wide as apex of protibia, 2 distinctly narrower; segment 3 of protarsus moderately enlarged; male mesotarsus with 1st segment about as large as that of protarsus, 2nd much narrower, 3rd not enlarged. Male metatibia (Fig. 116) with pointed tooth behind basal fourth, beyond inner side flattened, and bearing fine longitudinal keel. Metasternum without sexual characters. Aedeagus (Figs 117 to 119) 0.92 - 0.96 mm long. Apical portion of median lobe curved to left, hardly widened near tip.

R e m a r k s . This species may be readily recognised by its sexual characters. It may be distinguished from *B. monstrosetibialis* also by the colour pattern and by the finer elytral punctation. It occurs in mixed broad-leaved forests in Western and Central Nepal, and in Himachal Pradesh.

Baeocera tuberculosa sp. n.

Holotype, male: Nepal, Parbat distr., Ghoropani Pass, 2850 m, 5.X.1983 (Löbl & Smetana) (MHNG).

Paratypes, 3: as holotype, 1 male, 1 female; Parbat distr., Ghoropani Pass, 2700 m, 6.X.1983 and 10 ridge E Ghoropani Pass, 3000 m, 7.X.1983 (Löbl & Smetana) 1 male (all MHNG).

D i a g n o s i s . Member of the *satana* group with black body except for ochreous prothorax and mesepisternum. Elytron with sutural area narrowed anteriorly and apically. Apex of median lobe of aedeagus strongly enlarged; apical portion of left paramere abruptly narrowed, right paramere sinuate.

D e s c r i p t i o n . Similar to *B. thoracica* from which it differs by the colour pattern, the elytra and the sexual characters. Length 1.65-1.85 mm, width 1.2-1.3 mm. Male with head, apical and basal margins of pronotum, elytra, and most of ventral side of body black. Prothorax ochreous, apical and basal pronotal margins excepted. Mesepisternum ochreous as prothorax, or pale reddish. Apical abdominal segments very dark brown. Legs dark brown to black, trochanters reddish. Antennae yellowish or pale brown. In female, body entirely black. Elytron with sutural area vaulted and widest in middle, conspicuously narrowed anteriad and apicad; sutural striae very deep, extended along base to humeral hump, separated from lateral stria by wide space. Elytral disc uneven, with very shallow lateral and apical impressions. Elytral punctation fine near sutural stria and on apical portion, with punctures smaller than intervales, that on discal centre coarser, with many punctures about as large as intervales. In male, middle smooth metasternal area impressed, with coarse and dense punctation on each side of impunctate centre, and with conspicuous narrow elongate protuberance. Segments 1 and 2 of pro- and mesotarsus still wider than in *B. thoracica*, 1st segment of protarsus and mesotarsus as wide as apex of tibia. Metatibia with straight basal fourth, then moderately incurved, in apical two thirds equally wide. Aedeagus (Figs 120 to 122) 1.0 - 1.05 mm long. Median lobe asymmetrical, with apical portion strongly inflexed, and in dorsal view widened. Left paramere abruptly narrowed beyond middle.

R e m a r k s . This species exhibits unusual sexual characters. The male may be readily distinguished by its colour pattern from all *Baeocera*, *B. errabunda* excepted. Most specimens were found in debris of mixed *Rhododendron*-oak forest in Western Nepal.

Baeocera errabunda sp. n.

Holotype, male: Nepal, Sankhua Sabha distr., Goru Dzure Dara, eastern slope, 3350 m, 9.IV.1984 (Löbl & Smetana) (MHNG).

D i a g n o s i s . Member of the *satana* group with black body, ochreous prothorax and mesepisternum excepted. Sutural area of elytron widened in middle. Median lobe of aedeagus with right distal piece not enlarged at apex and moderately longer than left piece, apex of latter pointed. Parameres incurved, distal half of left paramere abruptly narrowed, right paramere dentate.

D e s c r i p t i o n . In external characters very similar to *B. tuberculosa*. Length. 1.65 mm, width 1.15 mm. Whole pronotum ochreous, basal margin only somewhat darkened; trochanters and femora black. Elytral disc almost evenly convex, flattened on small subapical area. Elytral punctuation rather fine, with almost all punctures much smaller than intervales. Median metasternal impression shallow, impunctate, delimited in middle by two keels. Middle portion of metasternum with few moderately coarse punctures. Metatibia straight and gradually stouter from base to mid-length, in apical half somewhat incurved, slender, and flattened on inner side. Aedeagus (Figs 123 to 125) 1.0 mm long. Apical portion of median lobe strongly asymmetrical, near tip strongly inflexed, with weakly sclerotized dorso-apical valve.

R e m a r k s . The pale prothorax is possibly a male secondary sexual character, as in *B. tuberculosa*. The species was found by sifting grass-tufts, fern and moss in Eastern Nepal.

Scaphisoma Leach

Scaphisoma Leach, 1817, type species: *Silpha agaricina* Linnaeus, 1758, by monotypy.
Scaphosoma Agazzi, 1846; injustified emendation.
Scaphiomicrus Casey, 1900; type species: *Scaphisoma pusilla* LeConte, by original designation.
Pseudoscaphosoma Pic, 1915; type species: *Pseudoscaphosoma testaceomaculatum* Pic 1915, by monotypy.
Scutoscaphosoma Pic, 1916; type species: *Scutoscaphosoma rouyeri* Pic, 1916, by monotypy.
Scaphella Achard, 1924; type species: *Scaphosoma antennatum* Achard, 1919, by original designation.
Scaphomicrus; Achard, 1924 (misspelling).
Macrobaeocera Pic 1924; type species: *Scaphosoma phungi* Pic, 1922, by monotypy.
Mimoscaphosoma Pic 1928 (sg); type species: *Scaphosoma* (*Mimoscaphosoma*) *bruchi* Pic, 1928, by monotypy.

Scaphisoma is the largest genus of the family in terms of species diversity. It includes about 500 species and is distributed in all major biogeographical regions, Antarctis excepted. Its occurrence on many oceanic islands (i.e., Hawaii, Micronesia, Mascarene Archipelago) suggests high dispersal ability. However, the genus seems to be absent from areas with cool (or cooler) temperate climate such as south of South America or New Zealand where other scaphidiids are encountered. The distribution of the Himalayan species does also suggest their greater thermophily than that of *Baeocera*: *Scaphisoma* is notably more speciose but rarely found above the tree-line. Most of the 93 species encountered in the Himalayan region and in other North Indian and Pakistani mountain ranges occur in subtropical and mixed broad-leaved forests and seem to have a wide range of distribution. The Nepalese collections that included 53 species (57% of the Himalayan species of *Scaphisoma*, of which 21 are new and described below) are likely to be more representative for that area than collections made in other parts of the Himalaya.

Additional 12 Himalayan species represented in the MHNG by females, or by males in poor condition, remain to be identified. They are not included in the present study.

The genus may be defined by several presumably derived characters states: antennomere IV short, basal angles of pronotum extended apically toward metepisternum, metacoxal lines usually distinct, pubescence reduced. Members of this genus exhibit great diversity in aedeagal characters. Several species groups have been distinguished based on this character (i.e., Löbl 1970; 1971; 1979; 1981). The phylogenetic significance of these characters will be investigated in an ulterior study, when also information on Afrotropical and Neotropical species will be available.

Only the presence, not the absence, of the hypomeral microsculpture and of the transverse row of punctures on the lateral portions of the metasternum are noted in the descriptions and redescriptions given below.

For practical reasons, the species known only from Meghalaya are also included in the key.

Key to the Himalayan species of *Scaphisoma*

1 Elytron with basal stria 2
– Elytron without basal stria 27
2 Elytron with uninterrupted basal stria 3
– Basal stria of elytron interrupted 9
3 Body uniformly blackish or black, elytron sometimes somewhat paler than pronotum 4

– Pronotum and/or elytra with distinct colour pattern 5
4 Metacoxal area narrow, its margin parallel to metacoxa ..... *kaszabianum* Löbl
– Metacoxal area wide, its margin arcuate ..... *kashmirense* Achard
5 Elytron dark reddish-brown with wide pale apical portion and with obsolete discal punctation ..... *baloo* sp. n.
– Elytron with different colour pattern and distinct discal punctation 6
6 Abdominal microsculpture consisting of distinct transverse striae ... *clavigerum* sp.n.
– Abdominal microsculpture obsolete or consisting of punctures 7
7 Elytron yellowish or ochreous, with narrowly darkened base and one or two small dark spots on central portion of disc (Fig.27) ..... *aurorae* sp. n.
– Elytron ochreous to reddish-brown, with large dark discal spot extended to sutural stria or sutural margin (Fig.38) 8
8 Internal sac of aedeagus without robust sclerite ..... *notatum* Löbl
– Aedeagus with internal sac armed with robust sclerite ..... *jado* sp.n.
9 Abdominal microsculpture consisting of transverse striae 10
– Abdominal microsculpture obsolete or consisting of punctures 13
10 Antennomere V about 3x as long as very short IV ..... *pseudorufum* Löbl
– Antennomere V as long as or moderately longer than IV 11
11 Elytron with large sub-basal reddish spot and pale apical portion (Fig.32) ..... *pulchellum* Löbl
– Elytron without particular colour pattern 12
12 Length below 2 mm. First ventrite with punctation on lateral portion much finer than that on centre ..... *assimile curvistria* Reitter
– Length 2 - 2.2 mm. First ventrite evenly, very finely punctate ..... *tonkineum* Pic
13 Elytron dark reddish-brown, with well delimited yellowish subapical fascia ..... *flavofasciatum* Löbl
– Colour pattern of elytron different 14
14 Antennomere IV short, somewhat longer than III, both combined as long as or shorter than V 15
– Antennomere IV long, combined with III longer than V 20
15 Head and pronotum black, elytra reddish-brown. Length 2.25- 2.40 mm ..... *inhospitale* Löbl
– Colour pattern different. Usually smaller species 16
16 Antennomere VI as long as or longer than segments III to V combined ..... *antennatum* Achard
– Antennomere VI shorter than segments III to V combined 17
17 Pronotum reddish-brown, elytra yellowish, with black basal spot ..... *nima* sp. n.
– Pronotum and elytra more or less uniformly dark reddish- brown 18
18 Antennomere VI notably longer than V ..... *inquietum* sp. n.
– Antennomere VI as long as or distinctly shorter than V 19
19 Antennomere V about 2x as long as IV ..... *adjacens* sp. n.
– Antennomere V about 4x as long as IV ..... *praesigne* sp. n.
20 Length 2.4 - 2.5 mm. Body uniformly black. Antennomere XI more than 4x as long as wide ..... *fatuum* sp. n.
– Length not exceeding 2.2 mm.. Body usually not uniformly black. Antennomere XI much less than 4x as long as wide 21
21 Punctation on lateral portion of metasternum much coarser than that on lateral portion of 1st ventrite ..... *viti* Löbl
– Punctation on lateral portions of both metasternum and of 1st ventrite very fine 22
22 Metacoxal line parallel to metacoxa ..... *uniforme* Löbl

– Metacoxal line arcuate 23
23 Mesocoxal area small, shorter than metacoxal area 24
– Mesocoxal area fairly large, about as long as metacoxal area 25
24 Elytral disc finely punctate, diameters of punctures on centre smaller than those of intervals ..... *rufum* Achard
– Elytral disc coarsely punctate, diameters of punctures on centre larger than those of intervals ..... *interjectum* sp. n.
25 Median portion of metasternum with wide U-shaped row of coarse punctures .... *minutum* Achard
– Metasternal punctation different 26
26 Ventral process of aedeagus robust, oblique. Punctation on medio-basal portion of metasternum and on 1st ventrite very dense ..... *puthzi* Löbl
– Ventral process of aedeagus slender and curved. Punctation of median portion on metasternum and on 1st ventrite fairly dense ..... *besucheti* Löbl
27 Very small species, length less than 1 mm ..... *minutissimum* Champion
– Larger species, at least 1 mm long 28
28 Antennomere IV conspicuously short, not or somewhat longer than III, both combined shorter than or about as long as V 29
– Antennomere IV elongate, notably longer than III, both combined usually longer than V 36
29 Abdominal microsculpture consisting of punctures..... 30
– Abdominal microsculpture consisting of transverse striae 32
30 Mesepimeral ridge distinct. Elytron with equally large discal punctures .... *falciferum* Löbl
– Mesepimeral ridge obsolete. Elytron with conspicuously irregular punctation 31
31 Elytral disc flattened, most of dense and coarse punctures situated on latero-central portion ..... *imitator* Löbl
– Elytral disc not flattened, most of dense and coarse punctures situated on central portion of disc ..... *mimicum* Löbl
32 Elytron with two well delimited reddish spots ..... *quadrimaculatum* Pic
– Elytron immaculate 33
33 Antennomere VI much longer than V, usually about as long as segments III to V combined 34
– Antennomere VI about as long as V, much shorter than III to V combined .... *peraffine* Löbl
34 Length 1.2 - 1.3 mm. Elytron uniformly blackish-brown or black ..... *discretum* Löbl
– Length 1.55 - 1.75 mm. Elytron black with pale apical margin 35
35 Parameres each equally wide in apical half ..... *fraterculum* Löbl
– Parameres each gradually narrowed sub-apically, with widened apical portion .... *fratellum* sp. n.
36 Pronotum and elytra dark brown to black, each elytron with reddish sub-basal spot or fascia, and with pale apical or subapical area. Metasternum with row of punctures parallel to metacoxa 37
– Colour pattern different 39
37 Elytron with subapical fasciae not extended to touch apical margin (Fig.33) .... *quadrifasciatum* Löbl
– Entire apical 1/4 to 1/3 of elytron ochreous or yellowish (Fig.34) 38
38 Pronotum and elytra densely and coarsely punctate, punctures visible at magnification 12x ..... *tetrastictum* Champion

– Pronotum and basal 1/3 of each elytron very finely punctate, punctures not or hardly visible at magnification 50x ..... *cederholmi* Löbl
39 Hypomeron with microsculpture consisting of striae 40
– Hypomeron without microsculpture 43
40 Metasternum without row of punctures parallel to metacoxa ..... *invalidum* sp. n.
– Metasternum with row of coarse punctures parallel to metacoxa 41
41 Punctation near lateral margins of pronotum conspicuously denser and coarser than that on conter ..... *pseudodelictum* Löbl
– Punctation near lateral margins of pronotum not or moderately coarser and denser than on centre 42
42 Punctation on pronotal base and centre equally or almost equally fine .. *argutum* Löbl
– Punctation on pronotal base distinctly coarser than that on pronotal centre .... *malignum* Löbl
43 Elytron with more or less dark or black basal spot extended apically along suture and forming triangular or subtriangular pattern 44
– Elytral coloration different 48
44 Metasternum with row of relatively coarse punctures parallel to metacoxa 45
– Row of punctures parallel to metacoxa usually absent or formed by very fine punctures 47
45 Elytron without apical or subapical darkened patch. Middle portion of pronotum darkened ..... *cruciatum* Champion
– Elytron with distinct dark subapical patch 46
46 Median lobe of aedeagus apically symmetrical, flat, tapering ..... *bhareko* sp. n.
– Median lobe of aedeagus apically stick-like, asymmetrical ..... *absurdum* Löbl
47 Middle portion of pronotum very finely punctate. Most of lateral portion of 1st ventrite not microsculptured ..... *sikkimense* sp. n.
– Pronotum coarsely punctate. Most of lateral portion of 1st ventrite microsculptured ... . *varium* Löbl
48 Lateral portion of metasternum without row of punctures parallel to metacoxa 49
– Lateral portion of metasternum with distinct row of punctures parallel to metacoxa 63
49 Abdominal microsculpture obsolete, or consisting of punctures or of extremely short striae 50
– Abdominal microsculpture consisting of distinct transverse striae 57
50 Mesocoxal area subtriangular..... 51
– Mesocoxal area oval or arcuate 52
51 Apical portion of median lobe wide, strongly flattened ..... *maindroni* Achard
– Apical portion of median lobe narrow, weakly flattened ..... *spurium* Löbl
52 Pronotum and elytron very dark, blackish-brown or black, except for pale elytral apices ..... *bedeli* Achard
– Pronotum and elytra uniformy more or less dark reddish-brown or elytra paler than pronotum 53
53 Median lobe of aedeagus conspicuously thick, with strongly inclined apical portion ... . *diabolum* Löbl
– Median lobe of aedeagus narrow 55
55 Aedeagus weakly sclerotized, with median lobe narrowed apically, parameres thin 56
– Aedeagus strongly sclerotized, in dorsal view apically widening or subparallel, parameres robust ..... *corbetti* Löbl

56 Parameres straight, symmetrical, widened at middle ..... *suknense* Löbl
– Parameres arcuate, asymmetrical, extremely thin, not widened at middle ..... *unicolor* Achard
57 Lateral portions of metasternum and 1st ventrite coarsely punctate ... *fulcratum* sp. n.
– Lateral portions of metasternum and 1st ventrite very finely punctate 58
58 Pronotum and elytra very dark reddish-brown to black, elytra with narrow apical portion distinctly paler 59
– Pronotum and elytra uniformly ochreous or more or less dark reddish-brown, apical elytral margin not or somewhat paler than elytral disc 60
59 Medio-basal area of 1st ventrite coarsely punctate beyond basal apophyse ..... *innotatum* Pic
– Entire first abdominal ventrite very finely punctate, marginal pits of metacoxal area excepted ..... *forcipatum* Champion
60 Aedeagus with distal portion of median lobe very short, with distinct sclerotized dorsal valve. Body pale ..... *garomontium* Löbl
– Aedeagus with distal portion of median lobe long, lacking sclerotized dorsal valve. Body dark 61
61 Parameres narrow ..... *simplicipenis* sp. n.
– Parameres wide ..... *luctans* Löbl
63 Abdominal microsculpture consisting of punctures 64
– Abdominal microsculpture consisting of transverse striae 68
64 Pronotum and elytra uniformly pale reddish-brown or ochreous ..... *aurun* Löbl
– Pronotum and elytra dark reddish-brown or blackish, elytra usually paler than pronotum 65
65 Mesocoxal area small, 0.03 - 0.04 mm long, with margin parallel to coxal cavity ..... *nebulosum* Löbl
– Mesocoxal area larger, with margin arcuate or sub-triangular 66
66 Elytron darkened subapically ..... *echinatum* Löbl
– Elytron uniformy dark reddish-brown or with darkened base 67
67 Entire first ventrite very finely punctate ..... *nefastum* Löbl
– First ventrite with more or less coarsely punctate medio-basal area .... *negligens* Löbl
68 Sutural striae of elytra strongly converging apically 69
– Sutural striae of elytra parallel, or weakly converging apically 72
69 Pronotum and most of elytra uniformy colored, very dark, usually black, elytron with large, sharply delimited pale apical area (Fig.35)..... *leucopyga* Champion
– Colour pattern different 70
70 Sutural stria of elytron curved near base (Fig. 36) ..... *binhanum* (Pic)
– Sutural stria of elytron angulate near base 71
71 Pronotum dark reddish-brown, with coarsely punctate base ..... *impolitum* Löbl
– Entire pronotum pale, ochreous or yellowish, very finely punctate ..... *dohertyi* Pic
72 Pronotum and hypomera much paler than ventral meso- and metathoral sclerites, sometimes bicolored. Elytron more or less distinctly maculate 73
– Pronotum, hypomera and entire ventral surface of thorax concolorous 77
73 Male pronotum ochreous, with black basal pattern (Fig.37), female pronotum dark reddish-brown ..... *maculigerum* Löbl
– Pronotum in both sexes uniformly pale, or with basal margin very narrowly darkened 74
74 Aedeagus with parameres fairly wide, not lobed ..... *nigrofasciatum* Pic
– Parameres of aedeagus each extended ventrally by large lobe with inner margin strongly sclerotized 75

75 Basal bulb of aedeagus extended dorso-apically, partly overlapping slender apical portion of median lobe ..... *atronotatum* Pic
– Basal bulb of aedeagus not extended apically 76
76 Length 1.85 - 2.05 mm. Internal sac of aedeagus with two pairs of large teeth .... *khasianum* Löbl
– Length 1.60 - 1.85 mm. Internal sac of aedeagus with single pair of large teeth .... *surya* Löbl
77 Antennomere V very long, about 3x as long as relatively short segment IV and 2x as long as segments III and IV combined ..... *onychiorum* Löbl
– Antennomere V not particularly long, about as long as, or moderately longer than IV 78
78 Aedeagus with apical portion of median lobe strongly asymmetrical, overlapped by parameres ..... *luctuosum* Löbl
– Aedeagus symmetrical, apical portion of median lobe not overlapped by parameres 79
79 Bulbous portion of median lobe extended dorso-apically, overlapping partly narrow apical portion of median lobe ..... *immodicum* Löbl
– Bulbous portion of median lobe not extended 80
80 Median lobe of aedeagus with single undivided dorsal valve ..... *flexuosum* Löbl
– Median lobe with two dorsal valves extended by arms or with single valve divided by deep suture 81
81 Each paramere of aedeagus with denticulate expansion 82
– Parameres of aedeagus not denticulate 83
82 Basal and central portions of internal sac of aedeagus bearing strongly sclerotized armature ..... *armatum* Löbl
– Apical portion of internal sac of aedeagus bearing sclerotized armature ... *minax* Löbl
83 Paramere of aedeagus not lobed or with minute lobe 84
– Paramere of aedeagus with large membranous lobe 93
84 Apical portion of paramere of aedeagus delimited by minute tooth, very narrow .... *coalitum* sp. n.
– Apical portion of paramere not delimited by tooth, as wide as, or wider than subapical portion 85
85 Apical portion of paramere sharply delimited ..... *alacre* sp. n.
– Apical portion of paramere not sharply delimited 86
86 Inner margin of widened apical portion of paramere sinuate..... *scabiosum* Löbl
– Inner margin of apical portion of paramere not sinuate 87
87 Internal sac of aedeagus with symmetrical, flat or arcuate central lamina 88
– Internal sac of aedeagus without central lamina 89
88 Lamina of internal sac of aedeagus angulate or sinuate anteriorly, strongly sclerotized laterally; apical sclerotized denticles of internal sac arranged in two rows .... *nepalense* sp. n.
– Lamina of internal sac of aedeagus tapering apically and evenly sclerotized; apical sclerotized denticles arranged in single row ..... *championi* Löbl
89 Basal portion of internal sac of aedeagus with row of strongly sclerotized denticles ... . *prehensor* Champion
– Basal portion of internal sac of aedeagus covered by minute, weakly sclerotized skale-like or spine-like structures 90
90 Internal sac of aedeagus with central sclerotized denticles arranged in two groups pointed toward median line, and with dense apical group of sclerotized denticles .... *geminatum* Löbl

– Internal sac of aedeagus different 91
91 Paramere of aedeagus with widest point (base excepted) situated far before middle ... . *kanchi* sp. n.
– Paramere of aedeagus parallel-sided up to middle or to apical third 92
92 Arms of dorsal valves of aedeagus very short; proximal end of internal sac strongly inflected dorsally ..... *varians* sp. n.
– Arms of dorsal valves of aedeagus elongate; proximal end of internal sac not or weakly inflected ..... *necopinum* sp. n.
93 Internal sac of aedeagus with long inflected basal tube and with two conspicuous, tooth-like sclerites in centre ..... *pinnigerum* sp. n.
– Internal sac of aedeagus lacking basal tube and pair of central tooth-like sclerites ... 94
94 Parameres of aedeagus each widened apically, with large overlapping lobes .... *atrox* Löbl
– Parameres of aedeagus each evenly wide, apically with small, not overlapping lobes ..... *indra* Löbl

New records

Scaphisoma rufum Achard

Material examined, 6 specimens (males only): Nepal, Kathmandu distr., Nagarjung forest, 1650 m, 2.IV.1981 (Löbl & Smetana) (MHNG) 1; Sindhupalcok distr., Pokhare NE Barahbise, 2700 m, 2.V.1981 (Löbl & Smetana) (MHNG) 1; Sankhua Sabha distr., forest S Mangsingma, 2200 m, 11.IV.1984 (Löbl & Smetana) (MHNG) 4.

Distribution. North India, Nepal, Singapore, Japan.

Scaphisoma pseudorufum Löbl

Material examined, 3 specimens: Nepal, Manang distr., forest W Bagarchhap, 2200 m, 21.IX.1983 (Löbl & Smetana) (MHNG).

Distribution. Nepal, India: Darjeeling distr., Thailand.

Scaphisoma corbetti Löbl

Material examined, 1 male: Nepal, Terai, Bara distr., Amlekhganj, 7-10.X.1970 (Franz) (Coll. H. Franz).

Distribution. India: Garhwal and Kumaon, Nepal.

Scaphisoma viti Löbl

Material examined, 4 specimens: Nepal, Gorkha distr., Arughat-Suteo, 600-700 m, 27.VII.1983 (Martens & Schawaller) (SMNS, MHNG).

Distribution. North Pakistan, Nepal.

Scaphisoma quadrifasciatum Löbl

Material examined, 11 specimens: India, Uttar Pradesh, Chakrata div., 7000 ft., 1.VII.1932 (Champion) (BMNH) 4; Nepal, Kathmandu distr., Gokarna forest, 1400 m, 31.III.1981 (Löbl & Smetana) (MHNG) 1; Patan distr., Phulcoki (Franz) (Coll. Franz) 1; Taplejung distr., Yamputhin, 1650-1800 m, 26.IV.1988 (Martens & Schawaller) (SMNS, MHNG) 5.

Distribution. North Pakistan, North India, Nepal.

Scaphisoma fraterculum Löbl

Material examined, 28 specimens: Nepal, Patan distr., Phulcoki, 2500-2700 m, 10.V.1981, 13-16.X.1983, 28-30.IV.1984 (Löbl & Smetana) (MHNG) 16; Phulcoki, near Godawari, 1700 m, 10.V.1981 (Löbl & Smetana) (MHNG) 1; Kathmandu distr., Siwapuri Dara, 2500 m, 1.V.1985 (Smetana) (MHNG) 1; Sindhupalcok distr., Gul Bhanjyang, 2600 m, 6.IV.1981 (Löbl & Smetana) (MHNG) 2; Malemchi, 2800 m, 18.IV.1981 (Löbl & Smetana) (MHNG) 1; Taplejung distr., above Yamputhin, left back of Kabeli Khola, 1800-2000 m, 27-29.IV.1988 (Martens & Schawaller) (SMNS) 4; SE Yamputhin to Yamputhin, 2000-1650 m, 26. and 30.IV.1988 (Martens & Schawaller) (MHNG) 1; Panchthar distr., Dhorpar Kharka, 2700 m, 16.IV.1988 (Martens & Schawaller) (MHNG) 1; Sankhua Sabha distr., Pahakhola, 2600-2800 m, 31.V.-3.VI.1988 (Materns & Schawaller) (SMNS) 1.

Distribution. North India, Nepal.

Scaphisoma notatum Löbl

Material examined, 76 specimens: Nepal, Jumla distr., Dzunda Khola Valley near Talphi, W Jumla, 3000-3500 m, 19.IX.1972 (Franz) (Coll. H. Franz) 1; Parbat distr., Ghoropani Pass, 2850 m, 5.X.1983 (Löbl & Smetana) (MHNG) 1; Ridge east Ghoropani Pass, 3100 m, 7.X.1983 (Löbl & Smetana) (MHNG) 1; Manang distr., Latha Manang W Bagarchhap, 2350 m, 22.IX.1983 (Löbl & Smetana) (MHNG) 1; Gorkha distr., Chuling Khola, 3000-3400 m, 3.VIII.1983 (Martens & Schawaller) (MHNG) 1; Kathmandu distr., Siwapuri Dara, 2400 m, 30.V.1985 (Smetana) (MHNG) 1; Siwapuri Dara, 2700 m, 24.III.1982 (Rougemont) (MHNG) 5; Siwapuri Dara, 2540 m, 7.X.1981 (Sakai) (Coll. M. Sakai) 2; Patan distr., Phulcoki, 2200-2700 m, VIII.1967, IV-V. 1981, IV.1982, X.1983 (Canadian Nepal Exp., Löbl & Smetana, A. & Z. Smetana) (CNC, MHNG) 38; Godawari, 13.III.1981 (Rougemont) (MHNG) 1; Sindhupalcok distr., Chaubas, 2600 m, 5.IV.1981 (Löbl & Smetana) (MHNG) 1; Gul Bhanjyang, 2600 m, 6.IV.1981 (Löbl & Smetana) (MHNG) 2; Malemchi, 2800-2900 m, 14. and 17.IV.1981 (Löbl & Smetana) 11; Pokhare NE Barahbise, 2700, 2800, and 3000 m, 2. and 7.V.1981 (Löbl & Smetana) (MHNG) 6; Sankhua Sabha distr., forest above Ahale, 2300 m, 26.III.1982 (A. & Z. Smetana) (MHNG) 3; Taplejung distr., Gunsa Khola betw. Kibla and Amjilera, 2600-2400 m, 12. IX.1983 (Martens & Dams) (SMNS) 1.

Distribution. North Pakistan, North India, Nepal.

Scaphisoma uniforme Löbl

Material examined, 52 specimens: Nepal, Manang distr. forest W Bagarchhap, 2200 m, 21.IX.1983 (Löbl & Smetana) (MHNG) 3; Parbat distr., Ghoropani Pass, N slope, 2700 m, 6.X.1983 (Löbl & Smetana) (MHNG) 5; Kathmandu distr., Siwapuri Dara, 2400 m, 29.IV.1985 (Smetana) (MHNG) 1; Siwapuri, 2700 m, 24.III.1982 (Rougemont) (MHNG) 1; Patan distr., Phulcoki, 2500-2600 m, 13-14.X.1983 and 28-30.IV.1984 (Löbl & Smetana) (MHNG) 32; Phulcoki, 2600 m, 20.IV.1982 (A. & Z.Smetana) 1; Sindhupalcok distr., Pokhare NE Barahbise, 2800 m, 3.V.1981 (Löbl & Smetana) (MHNG)1; Sankhua Sabha distr., Arun Valley, Chichila, 1900-2000 m,

18-20.VI.1981 (Martens & Schawaller) (SMNS) 1; forest NE Kuwapani, 2500 m, 28.III.1982 (A. & Z. Smetana) (MHNG) 2; above Ahale, 2300 m, 26.III.1982 (A. & Z. Smetana) (MHNG) 1; Induwa Khola Valley, 2400 m, 15.IV.1984 (Löbl & Smetana) (MHNG) 1; forest S Mangsingma, 2200 m, 11.IV.1984 (Löbl & Smetana) (MHNG) 3.

Distribution. North India, Nepal.

Scaphisoma kaszabianum Löbl

Material examined, 106 specimens: Nepal, Manang distr., Bagarchhap, 2200 m, 21.IX.1983 (Löbl & Smetana) (MHNG) 2; Parbat distr., betw. Chitre and Ghandrung, 6.V.1980 (Martens & Ausobsky) (SMNS) 1; Ghoropani, N. slope, 2700 m, 6.X. and Ghoropani Pass, 2850 m, 9.X.1983 (Löbl & Smetana) (MHNG) 6; Patan distr., Godawari, 6000 ft, 7-13.VIII.1967 (Canad. Nepal Exp.) 4; 2 km S Godawari, 1700 m, 19.X.1983 (Löbl & Smetana) (MHNG) 4; Phulcoki, 6600 ft, 13-17.VIII.1967 (Canad. Nepal Exp.) 1; Phulcoki, 2300-2600 m, X.1983 and V.1984 (Löbl & Smetana) (MHNG) 20; Kathmandu distr., Siwapuri, 2100-2300 m, 25.VI.1988 (Martens & Schawaller) (SMNS) 1; Siwapuri Dara, 2400 and 2450 m, 29. and 30.IV.1985 (Smetana) (MHNG) 2; Sindhupalcok distr., Gul Bhanjyang, 2600 m, 6.IV.1981 (Löbl & Smetana) (MHNG) 4; Malemchi, 2800 and 2900 m, 14-18.IV.1981 (Löbl & Smetana) (MHNG) 3; Pokhare NE Bharabise, 2700 m, 2. and 7.V.1981 (Löbl & Smetana) (MHNG) 13; Sankhua Sabha distr., forest NE Kuwapani, 2500 m, 11-15.IV.1982 (A. & Z.Smetana) and 2250 m, 24.IV.1984 (MHNG, CNC) 14; Arun Valley, betw. Mure and Hurure, 2050-2150 m, 17.VI.1988 (Martens & Schawaller) (SMNS) 2; forest S Mangsignma, 2250 m, 12.IV.1984 (Löbl & Smetana) (MHNG) 5; Induwa Khola Valley, 2000 m, 18.IV.1984 (Löbl & Smetana) (MHNG) 12; Panchthar distr., Paniporua, 2300 m, 16-20.IV.1988 (Martens & Schawaller) (SMNS) 10, Ilam distr., Mai Pokhari, 2100-2200 m, 25-27.III.1980 (Martens & Ausobsky) 1; Taplejung distr., above Yamputhin, left bank of Kabeli Khola, 1800-2000 m, 27-29.IV.1988 (Martens & Schawaller) (SMNS) 1.

Distribution. North India (West Bengal: Darjeeling district), Nepal.

Scaphisoma unicolor Achard

Material examined, 6 specimens (males only): Nepal, Patan distr., Godawari, Phulcoki, 1700 m, 10.V.1981 (Löbl) (MHNG) 1; Sankhua Sabha distr., Induwa Khola Valley, 1750 m, 14.IV.1984 (Löbl & Smetana) (MHNG) 1; Taplejung distr., SE Yamputhin to Yamputhin, 2000-1650 m, 30.IV.1988 (Martens & Schawaller) (SMNS) 1; above Yamputhin, left bank of Kabeli Khola, 1800-2000 m, 27-29.IV.1988 (Martens & Schawaller) (SMNS) 1; betw. Hellok and lower Gunza Khola, 2000-1650 m, 18.III.1988 (Marterns & Schawaller) (SMNS, MHNG) 2.

Distribution. Japan, Taiwan, Thailand, Nepal.

Scaphisoma besucheti Löbl

Material examined, 3 specimens: Nepal, Terai, Hitauri, 9.X.1972 (Franz) (Coll. H. Franz) 2; Parsa distr., Birganj Lothar 450 ft., 5-12.IX.1967 (Canad. Nepal Exp.) (CNC) 1.

Distribution. Sri Lanka, India, Nepal.

Scaphisoma maindroni Champion

Material examined, 17 specimens: Nepal, Terai, Hitauri, 9.X.1972 (Franz) (Coll. H. Franz) 2; Lamjung distr., Bahun danda, 1300 m, 18.IX.1983 (Löbl & Smetana) (MHNG) 4;

Marsyandi, 1200 m, Jagat, 11.IV.1980, (Martens & Ausobsky) (SMNS) 4; Gorkha distr., Daronti Khola betw. Doreni and Motar, 900-750 m, 13.VIII.1983 (Martens & Schawaller) (SMNS) 1; Sankhua Sabha distr., Dunge Dara N Tumlingtar, 1100 m, 23.III.1985 (A. & Z. Smetana) (MHNG) 3; Lamobagar Gao, 1400 m, 28-31.V.1980 (Wittmer) (NMB) 1; Ilam distr., betw. Ilam and Mai Pokhari, 1400-1600 m, 8.IV.1988 (Martens & Schawaller) (SMNS) 1; Sanishara, 5 km N, 270-300 m, 3-5.IV.1988 (Martens & Schawaller) (SMNS) 1.

Distribution. Pakistan, India, Nepal, Burma, Thailand, Vietnam, China.

Remarks. *Scaphisoma mutatum* Champion was placed in synonymy of *S. maindroni* (LÖBL 1986b). A male syntype of *S. mutatum* labelled "W.Almora Kumaon U.P. India H.G.C." is here desingated as lectotype (BMNH); 32 syntypes, sex not examined, from India, Kumaon, Haldwani distr. (BMNH) are designated as paralectotypes.

Scaphisoma spurium Löbl

Material examined, 26 specimens: India, Uttar Pradesh, Kumaon, Haldwani div. (Champion) (BMNH).

Distribution. Sri Lanka, North India: Kumaon and Garhwal.

Scaphisoma falciferum Löbl

Material examined, 2 specimens: Nepal, Manang distr., forest W Bagarchhap, 2200 m, 21.IX.1983 (Löbl & Smetana) (MHNG).

Distribution. Pakistan, North India: Kumaon and Himachal Pradesh, Nepal.

Scaphisoma diabolum Löbl

Material examined, 1 specimen: Nepal, Sankhua Sabha distr., Arun Valley below Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG).

Distribution. India: Darjeeling district, Nepal.

Scaphisoma leucopyga Champion

Material examined, 2 specimens: Nepal, Chitawan distr., Chitawan Nat. Park, X.1980 (Rougemont) 1; Kaski distr., betw. Viletadi and Uleri, trek from Pokhara to Ghoropani Pass, 18.IX.1971 (Franz) (Coll. H. Franz) 1.

Distribution. Afghanistan, Pakistan, North India, Nepal.

Scaphisoma nigrofasciatum Pic

Material examined, 3 specimens: Nepal, Gorka distr., Arighat - Suteo, 600-700 m, 27.VII.1983 (Martens & Schawaller) (SMNS, MHNG) 3.

Distribution. India, Nepal, Sri Lanka, Mascarene island, Seychelles.

Scaphisoma binhanum (Pic)

Material examined, 2 specimens: Nepal, Sankhua Sabha distr., Arun Valley below Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG) 1; Arun Valley, Lamobagar Gola, 1000-1400 m, 27.V.-3.VI.1980 (Holzschuh) (NMB) I.

Distribution. North India, Nepal, Burma, Thailand, Vietnam.

Scaphisoma atronotatum Pic

Material examined, 67 specimens: Nepal, Kathmandu distr., Gokarna forest, 1400 m, 31.III. - 1.IV.1981, 20.X.1983 (Löbl & Smetana) (MHNG) 62; Patan distr., Phulcoki, Godawari, 1700 m, 10.V.1981 (Löbl & Smetana) (MHNG) 1; Lamjung distr., Marsyandi, 1200 m, Jagat, 11.IV.1980 (Martens & Ausobsky) (SMNS) 1; Sankhua Sabha distr., Arun Valley below Num, 1050 m, 21.IV.1984 (Löbl & Smetana) (MHNG) 1; Taplejung distr., SE Yamputhin to Yamputhin, 2000-1650 m, 26. and 30. IV.1988 (Martens & Schawaller) (SMNS) 1; Ilam distr., Citang Khola Valley, 1750 m, 11-13.IV.1988 (Martens & Schawaller) (SMNS) 1.

Distribution. Nepal, Burma, Thailand.

Scaphisoma malignum Löbl

Material examined, 28 specimens: India, Uttar Pradesh, Kumaon, Haldwani distr. (Champion) (BMNH) I; Nepal, Parsa distr., Lothar near Birjang, 450 ft., 5-12.IX.1967 (Canad. Nepal Exp.) (CNC) 1; Kathmandu distr., Gokarna forest, 1400 m, 31.III. - 1.IV.1981 (Löbl & Smetana) (MHNG) 16; Sankhua Sabha distr., Arun Valley below Num, 1050 m, 21.IV.1984 (Löbl & Smetana) (MHNG) 2; Arun Valley, Lamobagar Gola, 1000-1400 m, 27.V.-3.VI.1980 (Holzschuh) (NMB, MHNG) 6; Arun Valley, Dunge Dara N Tumlingtar, 1100 m, 23.III.1982 (A. & Z.Smetana) (MHNG) 2.

Distribution. North India, Nepal.

Scaphisoma aurun Löbl

Material examined, 1 specimen: Nepal, Ilam distr., 5 km N Panishare, feet of Siwalik Mts, 270-300 m, 3-5.IV.1988 (Martens & Schawaller) (SMNS).

Distribution. Pakistan, South and North India, Nepal.

Scaphisoma indra Löbl

Material examined, 11 specimens: Nepal, Kathmandu, Nagarjung, Jamacok, 1900-2100 m, 18.VIII.1983 (Martens & Schawaller) (SMNS, MHNG) 6; Patan distr., Godawari, 13.III.1981 (Rougemont) and 1600 m, 31.III.1984 (Löbl & Smetana) (MHNG) 5.

Distribution. North India: Darjeeling district, Nepal.

Scaphisoma tetrastictum Champion

Material examined, 19 specimens: Nepal, Kathmandu distr., Gokarna forest, 1400 m, I.VI.1981 (Löbl & Smetana) (MHNG) 3; Ilam distr., SW Ilam below Parbate, 1250-1450 m,

23.VIII.1983 (Martens & Dams) (SMNS) 1; India, Uttar Pradesh, Kumaon, Tanakpur (Champion) (BMNH) 14, Kumaon, Ranikhet (BMNH) 1.

Distribution. India, Nepal, Burma, Thailand, Vietnam, Taiwan.

Scaphisoma varium Löbl

Material examined, 3 specimens: Nepal, Sankhua Sabha distr., forestr NE Kuwapani, 2250 m, 24.IV.1984 (Löbl & Smetana) (MHNG) 1; Panchthar distr., Paniporua, 2300 m, 16-20.IV.1988 (Martens & Schawaller) (MHNG) 1; ridge betw. Sheldoti and Paniporua, 2450-2200 m, 29.VIII.83 (Martens & Dams) (SMNS) 1.

Distribution. North India: Darjeeling district, Nepal, Bhutan.

Scaphisoma prehensor Champion

Material examined, 4 (males only): Nepal, Hitaura, Terai, 9.X.1972 (Franz) (Coll. H. Franz) 1; Ilam distr., 5 km N Sanishare, Siwalik Mts, 270-300 m, 3-5.IV.1988 (Martens & Schawaller) (SMNS, MHNG) 3.

Distribution. North India, Nepal.

Scaphisoma nefastum Löbl

Material examined, 38 specimens: Nepal, Mustang distr., Lete, 2550 m, 2.X.1983 (Löbl & Smetana) (MHNG) 1; Manang distr., forest W Bagarchhap, 2250 m, 22.IX.1983 (Löbl & Smetana) (MHNG) 10; Parbat distr., Chitre, 2400 m, 4.V.1980 (Martens & Ausobsky) (SMNS) 1; Nuwakot distr., Trisuli Khola, Dunche, 21-26.IX.1981 (Pawlowsky & Kuska) (IZK) 1; Kathmandu distr., Siwapuri, 2100-2300 m, 25.VI.1988 (Martens & Schawaller) 3; Siwapuri, 2450 m, 29.IV.1985 (Smetana) (MHNG) 1; Patan distr., 2 km S Godawari, 1700 m, 19.X.1983 (Löbl & Smetana) (MHNG) 1; Phulcoki, 2600 m, 13.X.1983 (Löbl & Smetana) (MHNG) 1; Phulcoki, 6600 ft, 4-7.VIII.1967 (Canadian Nepal Exp.) (CNC) 1; Sindhupalcok distr., Pokhare NE Barabhise, 2700 m, 2.V.1981 (Löbl & Smetana) (MHNG) 2; Sankhua Sabha distr., forest NE Kuwapani, 2500 m, 11-15. IV.1982 (A. & Z.Smetana) (MHNG) 3, and 2250 m, 24.IV.1981 (Löbl & Smetana) (MHNG) 2; Induwa Khola Valley, 2000 m, 16.IV.1984 (Löbl & Smetana) (MHNG) 2; forest S Mangsingma, 2200 m, 11.IV.1984 (Löbl & Smetana) (MHNG) 3; Panchtar distr., Paniporua, 2300 m, 16-20.IV.1988 (Martens & Schawaller) (SMNS) 1; Taplejung distr., Omje Kharka NW Yamputhin, 2300-2500 m, 1-6.V.1988 (Martens & Schawaller) (SMNS,MHNG) 5.

Distribution. North India: Kumaon, Darjeeling district, Nepal.

Scaphisoma necopinum Löbl

Material examined, 133 specimens: Nepal, Patan distr., Godawari, 7-13.VIII.1967 (Canadian Nepal Exp.) (CNC) 1; 2 km S Godawari, 1700 m, 19-20.X.1983 (Löbl & Smetana) (MHNG) 4; Phulcoki, Godawari, 1700m, 10.V.1981 (Löbl & Smetana) (MHNG) 1; Sankhua Sabha distr., below Sheduwa, 2550 m, 30.III.1982 and 2100-2550 m, 9.IV.1982 (A.& Z. Smetana) (MHNG) 13; Induwa Khola Valley, 2000 m, 16.IV.1984 (Löbl & Smetana) 15; Taplejung distr., Hellok in Tamur Valley, 2000 m, 17.V.1988 (Martens & Schawaller) (SMNS) 3; above Yamputhin, felt bank of Kabeli Khola, 1800-2000 m, 27-29.IV.1988 (Martens & Schawaller) (SMNS) 4; Yamputhin, open forest, 1650-1800 m, 26.IV. - 1.V.1988 (Martens & Schawaller) (SMNS, MHNG)

91; Panchtar distr., betw. Paniporua and Hinwa Khola Valley, 3200-1850 m, 27.IV.1988 (Martens & Schawaller) (SMNS) 1.

Distribution. North India: Darjeeling district and Sikkim, Nepal.

Scaphisoma fortipatum Champion

Material examined, 72 specimens: Nepal, Myagdi distr., Myangdi Khola, Muri, S Dhaulagiri, 2100-2300 m, III.1970 (Martens) (SMNS) 1; Kaski distr., Tandarakot, trek Pokhara - Ghoropani, 1000 m, 18.IX.1971 (Franz) (Coll. H. Franz) 3; Kathmandu distr., Gokarna, 1400 m, 31.III. and 1.IV. 1981, 10.IX. and 20.X.1983 (Löbl & Smetana) (MHNG) 18; Gokarna, 1400, 3.VIII.1970 and 3.X.1971 (Franz) (Coll. H. Franz) 3; Nagarjung forest, 1650 m, 2.IV.1981 (Löbl & Smetana) (MHNG) 2; Nagarjung, Jamacok, 1900-2000 m, 18.III. 1983 (Martens & Schawaller) (SMNS) 6; Siwapuri, 2100-2300 m, 25.VI.1988 (Martens & Schawaller) (SMNS) 1; Siwapuri Dara, 2300 m, 3.V.1985 (Smetana) (MHNG) 1; Patan distr., 2 km S Godawari, 1700 m, 19-20.X.1983 and 1600 m, 31.III:1984 (Löbl & Smetana) (MHNG) 8; Godawaki, 1770 m, 19.III.1980 (Martens & Ausobsky) (SMNS) 1; Phulcoki SE Godawari, cca 2000 m, 21.IV.1988 (Brachat) (MHNG) 4; Sindhupalcok distr., Chaubas, 2500 m, 4.IV.1981 (Löbl & Smetana) (MHNG) 3; Burlang Bhanjyang, 2600 m, 5.IV.1981 (Löbl & Smetana) (MHNG) 1; Pokhare NE Barahbise, 2800 m, 2.V.1981 (Löbl & Smetana) (MHNG) 1; Durumtali near Barahbise, 2200-2300 m, 5.VIII.1970 (Franz) (Coll. H. Franz) 1; Sankhua Sabha distr., below Sheduwa, 2550 m, 30.III.1982 (A. & Z.Smetana) (MHNG) 1; bottom Arun Valley below Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG) 3; bottom Arun Valley, betw. Hedangna and Num, 950-1000 m, 6-8.VI.1988 (Martens & Schawaller) (SMNS) 8; Taplejung distr., Tada Khola, Khebang, 1600-1800 m, 2.IX.1983 (Martens & Daams) (SMNS) 1; confluence Kabeli Khola and Tada Khola, 1000-1050 m, 23-25.IV.1988 (Martens & Schawaller) (SMNS) 2; ascent to Khebang from Tada Khola, 1500 m, 25.IV.1988 (Martens & Schawaller) (SMNS) 2; Hellok in Tamur Valley, 2000 m, 17.V.1988 (Martens & Schawaller) (SMNS) 2; Ilam distr., betw. Ilam and Mai Pokhari, 1600-2000 m, 9.IV.1988 (Martens & Schawaller) (SMNS) 1.

Distribution. Pakistan, North India, Nepal.

Scaphisoma innotatum Pic

Material examined, 34 specimens: Nepal, Sankhua Sabha distr., Arun Valley at Num, 1500-1600 m, 10.IV.1982 (A. & Z.Smetana) (MHNG) 1; bottom Arun Valley below Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG) 27; bottom Arun Valley, betw. Hedangna and Num, 950-1000 m, 6-8.VI.1988 (Martens & Schawaller) (SMNS) 6.

Distribution. North India, Nepal, Thailand, Vietnam.

Scaphisoma armatum Löbl

Material examined, 33 specimens: Nepal, Kathmandu distr., Gokarna, 1400 m, 31.III and 1.IV.1981, 10.X.1983 (Löbl & Smetana) (MHNG) 10; Patan distr., Godawari, 1600 m, 31.III.84 (Löbl & Smetana) (MHNG) 1; Sindhupalcok distr., Chaubas, 2600 m, 12.IV.1981 (Löbl & Smetana) (MHNG) 1; Rasuwa distr., 1.5 km NE Bhargu, 2000 m, 12.IV.1985 (Smetana) 2; Sankhua Sabha distr., bottom Arun Valley below Num, 1050 m, 21.IV.1984 (Löbl & Smetana) (MHNG) 1; below Sheduwa, 2100-2550 m, 9.IV. and 2550 m, 30.III.1982 (A. & Z. Smetana) (MHNG) 5; Induwa Khola Valley, 2000 m, 6.IV.1984 (Löbl & Smetana) (MHNG) 5; Ilam distr., Mai Pokhari, 2100-2200 m, 25-27.III.1980 (Martens & Ausobsky) (SMNS) 3; Taplejung distr., Yamputhin cultural land, 1650-1800 m, 26.IV.1988 (Martens & Schawaller) (SMNS) 5.

Distribution. North India, Nepal, Thailand.

Scaphisoma minax Löbl

Material examined, 18 specimens: Patan distr., 2 km S Godawari, 1700 m, 20.X.1983 (Löbl & Smetana) (MHNG) 2; Godawari, 1770 m, 17.III.1980 (Martens & Ausobsky) (SMNS) 2; Phulcoki SE Godawari, cca 1800 m, 22.IV.1988 (Brachat) (MHNG) 1; Phulcoki, 2700 m, 16.X.1983 (Löbl & Smetana) (MHNG) 1; Sankhua Sabha distr., forest above Ahale, 2300 m, 26.III.1982 (A.& Z.Smetana) (MHNG) 1; Arun Valley, Num-Chichila, 1500-1900 m, 17.VI.1980 (Holzschuh) (MHNG) 1; Arun Valley, betw. Mure and Hurure, 2050-2150 m, 17.VI.1988 (Martens & Schawaller) (SMNS) 4; Taplejung distr., SE Yamputhin to Yamputhin, 2000-1650 m, 26. and 30.IV.1988 (Martens & Schawaller) (SMNS) 2; Yamputhin, 1650-1800 m, 26.IV.-1.V.1988 (Martens & Schawaller) (SMNS) 3; Worebung Pass, 2000 m, 21.IV.1988 (Martens & Schawaller) (MHNG) 1.

Distribution. North India: Darjeeling district, Meghalaya; Nepal.

Scaphisoma immodicum Löbl

Material examined, 3 specimens: India, Himachal Pradesh, Kulu Valley, Naggar, 1850 m, 15.X.1988 (Vit) (MHNG).

Distribution. India: Himachal Pradesh.

Scaphisoma absurdum Löbl

Material examined, 2 specimens: Nepal, Gorkha/Dhading distr., Gorlabesi-Dobhan, 1000-1100 m, 30.VII.1983 (Martens & Schawaller) (SMNS) 1; Lamjung distr., Marsyandi, 1100-1250 m, Senghe-Jagat, 11.IV.1980 (Martens & Ausobsky) (MHNG) 1.

Distribution. North India: Darjeeling district, Nepal.

Redescriptions

Scaphisoma minutissimum Champion

Scaphosoma minutissimum Champion, 1927: 278.

Diagnostic characters. Length 0.90 mm, width 0.59 mm. Body ochreous, apices of elytra and abdomen paler. Legs and antennae yellowish. Relative length of antennomeres as follows: III 3, IV 5, V 10, VI 10, VII 13, VIII 9, IX 14, X 14, XI 20 (lectotype); segment V and XI about 3x, VI and VII about 2.5x, VIII 2x as long as wide. Pronotum with weakly arcuate lateral margins, lateral keels barely visible in dorsal view, discal punctation obsolete. Tip of scutellum exposed. Elytron with lateral margin oblique except near base; lateral keel visible in dorsal view; apical margin arcuate; inner apical angle at same level as outer angle; sutural margin not raised; sutural area flat; sutural stria parallel to suture, not curved near base and not extended laterally; discal punctation obsolete. Mesepimeral ridge longer than interval between its end and mesocoxa. Metastenum without any impression, not microsculptured, punctation obsolete (100x magnification). Mesocoxal area 0.04 mm long, with arcuate, very finely punctate margin. Metepisternum strongly narrowed anteriad, at same level as metasternum, with straight suture. First ventrite lacking visible microsculpture, punctation extremely fine (180x magnification). Metacoxal area 0.05 mm long, with margin arcuate, very finely

punctate. Tibia straight. Aedeagus (Fig.126) 0.23 mm long. Median lobe tapering, pointed. Parameres weakly sclerotized apically, curved. Internal sac with very slender flagellum.

Type material. Lectotype male, labelled "R.Sarda Gorge Kumaon, U.P. Dec. 1918 H.G.C." (BMNH), by present designation.

Distribution. India: Uttar Pradesh, Kumaon.

Remarks. The specimens of *Scaphisoma* cf. *minutissimum* recorded from Thailand (LÖBL 1990b) belong to another, undescribed species. They may be distinguished from *S. minutissimum* by the darker body, the coarser elytral punctation and by the different shape of the aedeagus.

Scaphisoma tonkineum Pic

Scaphosoma tonkineum PIC, 1922: 1; LÖBL 1976b: 224.

Diagnostic characters. Length 2.0 - 2.1 mm, width 1.43 - 1.48 mm. Body very dark reddish-brown to blackish, with apex of elytra and apical abdominal segments paler. Antennae long, relative length of segments as follows: III 5, IV 13, V 20, VI 28, VII 31, VIII 23, IX 28, X 29, XI 35 (lectotype). Pronotum densely and rather coarsely punctate, punctures barely visible at 12x magnification. Tip of scutellum distinct. Elytron with evenly arcuate lateral margin; inner apical angle exceeding level of outer angle; sutural margin not raised; sutural area flat; sutural stria parallel to sutural margin, curved along base and extended beyond middle of basal margin; discal punctation dense, coarser than that of pronotum and distinct at 12x magnification. Mesepimeral ridge somewhat shorter than interval between its end and mesocoxa. Metasternum without microsculpture, punctation dense and coarse on central portion, gradually sparser and much finer laterally. Mesocoxal area 0.08 - 0.10 mm long, with arcuate, coarsely punctate margin. Metepisternum narrowed anteriad. Abdomen with distinct microsculpture consisting of transverse striae. First ventrite very finely punctate. Tibia straight. Male protarsus with enlarged segments 1 to 3. Aedeagus 0.50 - 0.56 mm long (see LÖBL 1976b), with median lobe gradually tapering and strongly curved at tip. Parameres slender.

Type material. Lectotype, male, labelled "Hoa Binh Tonkin" (MNHN), by present designation.

Material examined, 2 specimens. India, Uttar Pradesh, Kumaon, Haldwani distr. (Champion) (BMNH) 1; Nepal, Pokhara - Ghoropani, Sept.-Oct.1977 (Franz) (Coll. H .Franz) 1.

Distribution. Vietnam, North India, Nepal.

Scaphisoma kashmirense Achard

Scaphosoma kashmirense ACHARD, 1920d: 240.
Scaphosoma ebeninum CHAMPION, 1927: 278 - syn. n.
Scaphisoma kashmirense; LÖBL 1970: 764, 1986a: 156, 1986b: 345.

Diagnostic characters. Length 2.0 - 2.2 mm, width 1.36 - 1.47 mm. Body blackish, elytra paler than pronotum, apex of abdomen, femora and tibiae reddish-brown, antennae and tarsi ochreous. Relative lengths of antennomeres as follows: III 8, IV 14, V 18, VI 20, VII 27, VIII 19, IX 25, X 24, XI 29. Pronotal punctation sparse and very fine, barely visible at 12x magnification, punctures well delimited, much smaller than intervals. Tip of scutellum exposed. Elytron with lateral keel not visible in dorsal view; apical margin truncate; inner apical angle exceeding level of outer angle; sutural margin

not raised; sutural area flat anteriorly, weakly vaulted in apical half; sutural stria from apex toward middle of sutural length somewhat diverging with sutural margin, then parallel to it, extended along base to forme uninterrupted basal stria joined with lateral stria; discal punctation fine and sparse, near base similar to that on pronotum, on centre and on apical area less fine, distinct at 12x magnification. Pygidium finely punctate, with microsculpture consisting of punctures. Mesepimeral ridge about as long as interval between its end and mesocoxa. Metasternum not microsculptured, punctation dense and rather coarse on medio-apical portion, very fine and sparse laterally. Mesocoxal area 0.05-0.06 mm long, with arcuate, coarsely punctate margin. Metepisternum at same level as metasternum, strongly narrowed anteriad, suture barely sinuate. Microsculpture of 1st ventrite consisting of distinct punctures on median portion, obsolete on lateral portion. Latter very finely and sparsely punctate. Metacoxal area 0.08 - 0.10 mm long, with arcuate, coarsely punctate margin. Tibia I and II somewhat curved, III straight. Aedeagus as figured in LÖBL (1986b).

Type material. Lectotype of *S. kashmirense*, male, labelled "Kashmir" (MNHN), designated in LÖBL (1970), examined. Holotype of *S. ebeninum*, female, labelled "Pindar V. Almora U.P., 8-11.000 ft. July 1920, H.G.C." (BMNH), examined.

Material examined, 10 specimens: India, Kashmir, forest above Pahalgam, 15.X.1977 (Franz) (Coll. H. Franz, MHNG) 2; Himachal Pradesh, Simla distr., Kufri, 24.VI.1975 (Sengupta & party) (ZSI) 1 and Kufri, 16.VII.1989 (Riedel) (SMNS, MHNG) 6; Nepal, Patan distr., Phulcoki, 2550 m, 29.IV.1984 (Löbl & Smetana) 1.

Distribution. North Pakistan, North India, Nepal.

Scaphisoma cruciatum Champion

Scaphosoma cruciatum CHAMPION, 1927: 275.

Diagnostic characters. Length 2.0 mm, width 1.35 mm. Body ochreous, pronotal base and median portion darkened, elytral base strongly darkened, dark pattern extended apically to form triangular spot exceeding mid-length of elytron (Fig.26). Apical portion of elytron, apical abdominal segments, legs and antennae pale ochreous. Relative length of antennomeres as follows: III 8, IV 20, V 30, VI 24, VII 27, VIII 21, IX 28, X 27, XI 33. Pronotal punctation very dense and coarse, visible at 12x magnification. Tip of scutellum exposed. Elytron with lateral keel visible from base to apex in dorsal view; apical margin weakly rounded; inner apical angle at same level as outer angle; sutural margin somewhat raised apically, flat basally; sutural area finely punctate; sutural stria weakly diverging from apex toward anterior 1/5 of sutural length, then parallel to sutural margin, somewhat curved at base, not extended along basal margin; discal punctation very dense, most punctures larger than intervals, near base finer than on centre. Pygidium extremely finely punctate, with distinct microsculpture consisting of punctures. Mesepimeral ridge longer than interval between its end and mesocoxa. Metasternum microsculptured along posterior margin only, densely and rather coarsely punctate on medio-apical area, very finely and sparsely punctate between mesocoxae and on lateral portion; with 2 shallow medio-apical impressions. Mesocoxal area 0.09 mm long, with inner margin arcuate, outer margin almost oblique, marginal punctures distinct. Metepisternum strongly narrowed anteriad, impressed along suture, latter straight except at angles. Abdomen with distinct microsculpture consisting of transverse striae, entire 1st ventrite very finely punctate. Metacoxal area 0.10 mm long, with margin arcuate, coarsely punctate.

Type material. Holotype, female, labelled "India: Kumaon Haldwani Distr. H.G.Champion B.M.1930-59" (BMNH), examined.

Remarks. None of the male specimens of different Himalayan species could be in satisfactory way associated with the female holotype of *S. cruciatum*. Other species with similar colour pattern (*S. bhareko*, *S. sikkimense*) differ by their punctation.

Scaphisoma championi Löbl

Scaphosoma cribripenne Champion, 1927: 277; nec *S. cribripenne* (Pic, 1923).
Scaphisoma championi Löbl, 1981: 158.

Diagnostic characters. Length 1.35 - 1.55 mm, width 0.95 - 1.10 mm. Most of body and femora ochreous, pronotum usually somewhat paler than elytral disc, apical portion of elytra, hypomera, apical abdominal segments, tibiae, tarsi and antennae yellowish or pale ochreous. Antennae as in other species of the group. Pronotum with lateral margins evenly arcuate; lateral keels usually not visible in dorsal view; discal punctation fine nad rather dense, visible at 24x magnification. Tip of scutellum exposed. Elytron with lateral margin arcuate; lateral keel usually visible in dorsal view from base to apex; apical margin truncate; inner apical angle exceeding level of outer angle; sutural margin raised; sutural area flat, with a row of rather large punctures; sutural stria gradually, moderately diverging from apex to base, curved near base, not extended laterad of pronotal lobe; punctation coarse and dense on most of elytral surface, finely punctate humeral area excepted, with punctures not well delimited, usually larger than intervals. Pygidium without visible punctation. Mesepimeral ridge about 2x as long as interval between its end and mesocoxa. Median portion of metasternum flattened, without any impression, with microsculpture consisting of transverse striae, distinctly punctate except on portions between mesocoxae and between metacoxae. Lateral portion of metasternum lacking microsculpture, with very dense row of rather coarse punctures parallel to metacoxa, and moderately coarse punctures beyond mesocoxal area; most of metasternal surface extremely finely punctate. Mesocoxal area 0.06-0.07 mm long, with margin parabolic, rather finely punctate. Metepisternum large, flat, narrowed anteriad, at same level as metasternum, its suture more or less rounded. Abdomen with microsculpture consisting of transverse striae. First ventrite extremely finely and very sparsely punctate. Metacoxal area 0.07 - 0.08 mm long, with arcuate, coarsely punctate margin. Tibia straight. Segments 1 to 3 of male protarsus distinctly widened. Aedeagus (Fig. 150) 0.68 - 0.70 mm long. Median lobe with strongly inclined, slender apical portion, and short, narrow valves. Internal sac with rows of medio-apical fairly large and strongly sclerotized teeth accompanied laterally by membranous scales. Central portion of internal sac with oval disc overlapping fine scales and with two laterally denticulate, strongly sclerotized areas. Base of internal sac armed by two slender, proximally curved sclerites, membranes near basal margin scale-like or papillar. Parameres beyond strongly widened base moderately convergent, then narrowed and strongly curved.

Type material. Lectotype of *S. cribripenne* Champion, male, labelled "India: Kumaon, Haldwani Distr. H.G. Champion B.M.1930-59" (BMNH), by present designation. Paralectotypes: 46 specimens; additional 16 specimens, all with same locatity data as lectotype (BMNG, MHNG).

Distribution. India, Uttar Pradesh: Kumaon.

Scaphisoma bedeli Achard

Scaphosoma bedeli Achard, 1920d: 240.

Diagnostic characters. Length 1.8 mm, width 1.10 mm. Pronotum very dark, almost black. Elytra blackish-brown, with paler, dark reddish-brown apical 2/7.

Apex of abdomen, legs and antennae ochreous. Relative length of antennomeres as follows: III 6, IV 10, V 16, VI 23, VII 28, VIII 20, IX 26, X 23, XI 29; segment IV about 2x as long as wide, V almost 4x as long as wide, VI more than 4x as long as wide; VII 3.5x as long as wide; VIII about 3x as long as wide. Pronotum with lateral margins evenly rounded, lateral keels not visible in dorsal view; punctation sparse and very fine, visible at 24x magnification. Tip of scutellum exposed. Elytron with almost evenly arcuate lateral margin; lateral keel not visible in dorsal view; apical margin truncate; inner apical angle about at same level as outer angle; sutural area flat, with a row of very fine punctures; sutural stria parallel to suture, curved near base, not extended laterally of pronotal lobe; punctation fine to very fine, punctures shallow, not well delimited, smaller than intervals. Pygidium with microsculpture consisting of punctures, and with very fine but well delimited punctures. Mesepimeral ridge about as long as interval between its end and mesocoxa. Metasternum with two shallow medio-apical impressions, entire surface with very fine to obsolete punctation. Mesocoxal area 0.07 mm long, with margin arcuate, finely punctate. Metepisternum flat, narrowed anteriad, impressed below level of metasternum, suture almost straight, anterior angle rounded. Entire first ventrite very finely punctate, not microsculptured. Metacoxal area 0.05 mm long, with arcuate, coarsely punctate margin. Following ventrites with microsculpture consisting of points.

Type material. Lectotype, female, labelled "Sikkim Kurseong" (NMP), by present designation.

Distribution. India: Darjeeling district.

Remarks. The specimens recorded as *Scaphisoma* cf. *bedeli* in Löbl (1986a) belong to *S. varians* described below. Non of the recently collected specimens have been found conspecific with the lectotype of *S. bedeli*.

New species

Scaphisoma praesigne sp. n.

Holotype, male: Nepal, Kathmandu distr., Gokarna forest, 1400 m, 1.IV.1984 (Löbl & Smetana) (MHNG).

Diagnosis. Body moderately large, without particular colour pattern. Antennomere IV very short. Basal stria of elytron short. Abdominal microsculpture consisting of punctures. Median lobe of aedeagus asymmetrical, internal sac simple, with extruded flagellum, parameres symmetrical, strongly expanded basally.

Description. Length 1.65 mm, width 1.10 mm. Body uniformly reddish-brown, tarsi and antennomeres I to VI paler, antennal club brownish. Relative length of antennomeres as follows: III 4.5, IV 5, V 20, VI 18, VII 22, VIII 15, IX 22, X 20, XI 23; IV very small, V about 3.5x as long as wide; VI and VII each about 2.5x as long as wide; VIII 2x as long as wide; XI somewhat more than 2x as long as wide. Pronotum with arcuate lateral margins; lateral keels not visible in dorsal view; discal punctation very fine, distinct at 24x magnification. Tip of scutellum exposed. Elytron with arcuate lateral margin; lateral keel not visible in dorsal view; apical margin somewhat rounded; inner apical angle lying at same level as outer angle; sutural margin not raised; sutural stria parallel to suture, curved at base and extended laterally to middle of basal margin; sutural area flat, with row of very fine punctures; discal puctation very fine, expecially on humeral area. Pygidium extremely finely punctate, apparently without microsculpture (100x magnification). Mesepimeral ridge about as long as intervals between its end and

mesocoxa. Entire metasternum very finely and sparsely punctate, not microsculptured. Mesocoxal area 0.05 mm long, with arcuate, very finely punctate margin. Metepisternum flat, narrowed anteriad, suture straight except at anterior angle. Entire first ventrite without microsculpture, very finely and sparsely punctate. Metacoxal area 0.07 mm long, with arcuate, finely punctate margin. Following ventrites with microsculpture consisting of punctures. Pro- and metatibia straight, mesotibia weakly curved. Segments 1 to 3 of protarsus weakly widened. Aedeagus (Figs 127, 128) 0.54 mm long. Median lobe and parameres asymmetrical. Apical portion of median lobe gradually narrowed and with curved tip and membranous lateral margin; ventral process protruding from expanded ventral wall. Internal sac simple, with long flagellum. Parameres moderately arcuate, with widened base, and very weakly sclerotized central portion of inner margin.

R e m a r k s . This species shares an asymmetrical aedeagus with the members of the *unicolor* group. It may be readily distinguished from all of them by the very short antennomere IV.

Scaphisoma fulcratum sp. n.

Holotype, male: Nepal, Patan distr., 2 km S Godawari, 1700 m, 19.X.1983 (Löbl & Smetana) (MHNG).

Paratype, male: India, Himachal Pradesh, 10 km NW Sarahan, 1700 m, 7.X.1988 (Vit) (MHNG).

D i a g n o s i s . Body moderately large, without distinctive colour pattern. Antennomere IV elongate. Elytron without basal stria. Abdominal microsculpture consisting of striae. Aedeagus symmetrical, median lobe with unpaired dorsal valve and small ventral process, internal sac bearing single slender median sclerite.

D e s c r i p t i o n . Length 1.40 - 1.65 mm, width 1.08 - 1.13 mm. Body very dark reddish-brown, apices of elytra, apical abdominal segments, legs and antennae ochreous or yellowish. Relative length of antennomeres as follows: III 6, IV 12, V 16, VI 17, VII 22, VIII 15, IX 22, X 22, XI 35; segments III to VII and XI each about 3x as long as wide; VIII less than 3x as long as wide. Pronotum with evenly arcuate lateral margins; lateral keels not visible in dorsal view; punctation conspicuously dense, coarser near base than that on centre or near apex; punctures near base larger than intervals, those on centre smaller than intervals, visible at 24x magnification. Tip of scutellum exposed. Elytron with arcuate lateral and apical margins; lateral keel not visible in dorsal view; inner apical angle at same level as outer angle; sutural margin not raised; sutural area flat, with row of fine punctures; sutural stria parallel to suture, not curved near base; punctation dense and, except that on humeral area, somewhat more coarse than that on pronotal base, punctures well delimited, mostly smaller than intervals. Mesepimeral ridge somewhat shorter than interval between its end and mesocoxa. Metasternum without microsculpture, lacking depressions; metasternal punctation very dense, relatively coarse, punctures on apical portion larger than intervals. Mesocoxal area 0.05 mm long, margin arcuate, rather finely punctate. Metepisternum weakly convex, narrowed anteriad, impressed along weakly sinuate suture, latter accompanied by coarse punctures. Abdomen with microsculpture consisting of transverse striae. First ventrite coarsely punctate near base, finely punctate near apical margin. Metacoxal area 0.06 mm long, with arcuate, rather finely punctate margin. Tibia straight. Segments 1 to 3 of male protarsus moderately widened. Aedeagus (Fig.129) 0.38 - 0.55 mm long. Median lobe tapering apically, with single dorsal valve and ostium situated near apex. Internal sac with slender central stick-like sclerite; membranes

covered by fine scales. Parameres straight, narrow, moderately narrowed from base toward middle third, then evenly wide, not exceeding tip of median lobe.

R e m a r k s . Species of uncertain relationship. It may be recognised by the combination of both, external and aedeagal characters.

Scaphisoma interjectum sp. n.

Holotype, male: Nepal, Sankhua Sabha distr., Arun Valley, Chichile, forest above Ahale, 2300 m, 26.III.1982 (A. & Z. Smetana) (MHNG).

Paratypes, 6: Sankhua Sabha distr., Arun Valley, betw. Mure and Hurure, 2050-2150 m, 17.VI.1988 (Martens & Schawaller) (SMNS, MHNG) 1 male, 1 female; Patan distr., Phulcoki, 2550 m, 15.X.1983 (Löbl & Smetana) (MHNG) 1 male; Phulcoki, 6600 ft., 13.VIII.1967 (Canadian Nepal Exp.) (CNC) 1 female; Manang distr., forest W Bagarchhap, 2200 m, 24.IX.1983 (Löbl & Smetana) (MHNG) 1 male, 1 female.

D i a g n o s i s . Body rather small, uniformly brown. Antennomere IV elongate. Elytron with interrupted basal stria. Abdominal microsculpture consisting of punctures. Aedeagus symmetrical, median lobe with short, split dorsal valves, internal sac without flagellum or sclerotized pieces, parameres lobed.

D e s c r i p t i o n . Length 1.45 mm, width 1.03-1.08 mm. Body and femora uniformly brown. Apex of abdomen, tibiae, tarsi and antennae yellowish or ochreous. Relative length of antennomeres as follows: III 6, IV 12, V 16, VI 18, VII 24, VIII 18, IX 20, X 19, XI 26 (holotype); IV and VIII 3x as long as wide, VI, VII, and XI each somewhat more than 3x as long as wide. Pronotum with lateral keels not visible in dorsal view; discal punctation very fine, visible at 24x magnification. Tip of scutellum exposed. Elytron with lateral keel visible near base in dorsal view; apical margin weakly rounded; inner apical angle at same level as outer angle; sutural margin raised; sutural area flat or weakly oblique, with row of very fine punctures; sutural stria parallel to sutural margin, curved at base and extended along base to outer 1/3 of basal margin; discal punctation coarse and dense except near base, with many punctures larger than intervals; punctures near base fine and scattered, much smaller than intervals, coarser than those on pronotum. Pygidium extremely finely punctate, with barely visible microsculpture. Mesepimeral ridge longer than interval between its end and mesocoxa. Metasternum without microsculpture, apical depressions obsolete, punctation fine on medio-apical portion, very fine and sparse on lateral portion. Mesocoxal area 0.04 mm long, with arcuate, rather finely and sparsely punctate margin. Metepisternum flat, moderately narrowed anteriad, at same level as metasternum, suture straight, except for rounded anterior angle. First ventrite without microsculture, its punctation very fine laterally, much coarser on median portion. Metacoxal area 0.06 mm long, subtriangular, margin coarsely punctate. Following ventrites with microsculpture consisting of distinct punctures. Tibia slender, straight. Male protarsus with segments 1 to 3 enlarged. Aedeagus (Fig. 130) 0.62 - 0.67 mm long. Median lobe relatively large, with very short apical portion and weakly sclerotized lateral margins, dorsal valves symmetrical, distinctly split medially. Internal sac mostly membranous, bearing very small rounded or pointed scales; in addition with several slender, more or less well delimited, stronger sclerotized pieces. Parameres widened in basal half, each expanded and forming a fairly large inner lobe before middle, slender and very weakly curved in apical half.

R e m a r k s . This species shares most diagnostic characters with *S. rufum*. It may be distinguished by the shorter and wider apical portion of the median lobe, by the parameral lobes situated closer to the base, and by the elytral punctation.

Scaphisoma simplicipenis sp. n.

Holotype, male: Nepal, Patan distr., Phulcoki, 2550 m, 29.IV.1984 (Löbl & Smetana) (MHNG).

Paratypes, 114: as holotype, 16 males, 28 females; Phulcoki, 1700 m, 10.V.1981 (Löbl) (MHNG) 3 males; Phulcoki, 2500 m, 30.IV.1984 (Löbl & Smetana) (MHNG) 1 male, 6 females; Phulcoki, 2600 and 2700 m, 14. and 15.X.1983 (Löbl & Smetana) (MHNG) 1 male, 1 female; Kathmandu distr., Siwapuri Dara, 2500 m, 1.V.1985 (Smetana) (MHNG) 1 male, 2 females; Sindhupalcok distr., Pokhare NE Barahbise, 2800 m, 2. and 3.V.1981 (Löbl & Smetana) (MHNG) 1 male, 2 females; Parbat distr., Ghoropani Pass, 2850 m, 5.X.1983 and N slope of Ghoropani Pass, 2700 m, 6.X.1985 (Löbl & Smetana) (MHNG) 2 males; Manang distr., forest W Bagarchhap, 2200 m, 21.IX.1983 (Löbl & Smetana) (MHNG) 11 males, 4 females; Latha Manang W Bagarchhap, 2450 m, 23.IX. 1983 (Löbl & Smetana) (MHNG) 1 male, 1 female; Sankhua Sabha distr., forest NE Kuwapani, 2250 m, 24.IV.1984 (Löbl & Smetana) (MHNG) 1 male; Chichila, 2200 m, 24.IV.1984 (Löbl & Smetana) (MHNG) 2 females; Pahakhola, 2550 m, 30-31.V.1988 (Martens & Schawaller) (SMNS, MHNG) 11 males, 18 females; Taplejung distr., above Yamputhin, left bank of Kabeli Khola, 1800-2000 m, 27-29.IV.1988 (Martens & Schawaller) (SMNS) 1 male.

D i a g n o s i s . Body moderately large, without distinctive colour pattern. Antennomere IV elongate. Elytron without basal stria. Abdominal microsculpture consisting of striae. Aedeagus symmetrical, with small basal bulb, robust ventral process, simple internal sac bearing long flagellum, and bases of parameres strongly widened.

D e s c r i p t i o n . Length 1.55 - 1.70 mm, width 1.03 - 1.16 mm. Body very dark brown to blackich, elytra sometimes paler than pronotum. Apical abdominal segments reddish-brown or brown, legs and antennae ochreous. Relative length of antennomeres as follows: III 6, IV 10, V 16, VI 23, VII 28, VIII 20, IX 26, X 25, XI 28 (holotype). Segment IV about 2.5x as long as wide, V, VIII and XI each 3x as long as wide, VI 4x as long as wide, VII about 3.5x as long as wide. Pronotum with evenly arcuate lateral margins, lateral keels not visible in dorsal view; discal punctation sparse and very fine, visible at 24x magnification. Tip of scutellum exposed. Elytron with central portion of lateral margin oblique; lateral keel not visible, or visible near base in dorsal view; apical margin weakly convex; inner apical angle at same level as outer angle; sutural margin not raised; sutural stria parallel to suture, curved near base but not extended laterally; discal punctation sparse and very fine, similar to that of pronotum or somewhat more distinct. Pygidium with microsculpture consisting of transverse striae. Mesepimeral ridge shorter than interval between its end and mesocoxa. Metasternum with shallow medio-apical impression, entirely very finely punctate, without microsculpture. Mesocoxal area 0.04 mm long, with margin arcuate, finely punctate. Metepisternum narrowed anteriad. First ventrite without microsculpture, very finely punctate. Metacoxal area 0.05 mm long, with rounded, finely punctate margin. Following ventrites with microsculpture consisting of short transverse striae. Tibia straight. Segments 1 to 3 of male protarsus rather strongly enlarged. Aedeagus (Figs 131,132) 0.56 - 0.57 mm long. Median lobe with small basal bulb extended ventro-apically, to forme strong ventral process, and with very long, slender apical portion, with margins parallel from base toward middle, than tapering. Internal sac simple, with long flagellum accompanied laterally by extremely fine, pointed scales. Parameres strongly sclerotized, reaching level of median lobe, at base strongly widened, in lateral view arcuate, in dorsal view irregularly curved.

R e m a r k s . This species shares with the species of the *unicolor* group the median lobe of the aedeagus with small basal bulb with very robust ventral process, and simple internal sac with long flagellum. It differs from members of that group by the symmetrical and strongly sclerotized aedeagus.

Scaphisoma fatuum sp. n.

Holotype, male: Nepal, Myandi distr., Kali Gandaki Khola, Kopchepani, 1500-1700 m, 15.V.1984 (Holzschuh) (MHNG).

Paratypes, 3: as holotype, 2 males, 1 female (MHNG).

Diagnosis. Large-sized member of the *subalpinum* group. Antennomere IV fairly long, XI strongly elongate. Basal stria of elytron interrupted. Aedeagus with simple flagellum conspicuously narrowed and incurved apically.

Description. Length 2.4 - 2.5 mm, width 1.71 - 1.75 mm. Body black, apex of abdomen, legs and antennae ochreous, except brown basal antennomeres. Antennae long, relative length of segments as follows: III 10, IV 15, V 19, VI 29, VII 34, VIII 25, IX 32, X 33, XI 50 (holotype); segments IV, V, VII, VIII, and IX each about 3x as long as wide, VI about 4x as long as wide, XI nearly 5x as long as wide. Pronotum with lateral keel not visible in dorsal view, punctation very fine, visible at 24x magnification. Tip of scutellum exposed. Elytron with arcuate lateral margin; lateral keel visible in dorsal view only near base; apical margin rounded; inner apical angle at same level as outer angle; sutural margin not raised, sutural area flat, with a row of fine punctures; sutural stria parallel to sutural margin, curved at base and extended along basal margin toward outer third of basal width; punctation dense and rather coarse, punctures rather well delimited, definitively smaller than intervals. Pygidium very finely punctate, with microsculpture consisting of punctures. Mesepimeral ridge somewhat longer than interval between its end and mesocoxa. Metasternum without microsculpture and without depressions; middle portion flat, rather coarsely and densely punctate apically, elsewhere very finely and sparsely punctate. Mesocoxal area 0.06 mm long, its margin arcuate, rather coarsely punctate. Metepisternum somewhat vaulted, strongly narrowed anteriad, its margin straight or weakly sinuate, impressed below level of metasternum. Abdomen with distinct microsculpture formed by punctures. First ventrite very finely punctate laterally, somewhat less finely punctate on middle portion. Metacoxal area 0.10 mm long, with arcuate, coarsely punctate margin. Tibia straight. Male with segments 1 to 3 of protarsus strongly enlarged, narrower than apex of protibia. Segment 1 of male mesotarsus weakly enlarged. Aedeagus (Fig. 133) 1.06 - 1.10 mm. Median lobe with apical portion fairly long, gradually tapering, very slender tip. Internal sac with very long, slender flagellum incurved and narrowed apically. Parameres narrowed from base toward middle, then evenly slender and weakly curved.

Remarks. This species is a member of the *subalpinum* group. It resembles *S. antennatum* by the conspicuously long antennomere XI. However, it differs in having much longer antennomere IV. *Scaphisoma fatuum* may be readily distinguished from other members of the group by the large size of the body.

Scaphisoma adjacens sp. n.

Holotype, male: Nepal, Sankhua Sabha distr., Arun Valley, Chichila, 2200 m, 24.IV.1984 (Löbl & Smetana) (MHNG).

Paratype, male: Nepal, Taplejung distr., above Yamputhin, left bank of Kabeli Khola, open forest, 1800-2000 m, 27-29.IV.1988 (Martens & Schawaller) (SMNS).

Diagnosis. Member of the *subalpinum* group. Body fairly large. Antennomere IV very short, XI moderately long. Elytron with basal stria interrupted. Aedeagus with basal two thirds of flagellum extended laterally, and ending as very thin tube; parameres almost evenly narrow.

Description. Length 1.85 - 1.90 mm, width 1.23 - 1.27 mm. Body very dark reddish-brown, apex of abdomen, femora and tibiae paler. Tarsi ochreous. Antennomeres I to IV yellowish, following pale brown. Relative length of antennomeres as follows: III 6, IV 7, V 16, VI 17, VII 25, VIII 18, IX 23, X 22, XI 26 (holotype); segment IV only

somewhat longer than wide, V, VI and VII each about 2.5x as long as wide, VIII somewhat more than 2x as long as wide, XI 2x as long as wide.Pronotum with lateral keels not visible in dorsal view; discal punctation rather sparse and fine, visible at 24x magnification. Tip of scutellum exposed. Elytron with evenly arcuate lateral margin; lateral keel not visible in dorsal view; apical margin truncate; inner apical angle exceeding level of outer angle, sutural margin not raised; sutural area flat, with a row of very fine punctures; sutural stria parallel to suture, curved at base and extended laterally, forming shallow basal stria interrupted in humeral area; discal punctation very fine near elytral base, elsewhere about as fine as or coarser than that of pronotum, with punctures well delimited, much smaller than intervals. Propygidium relatively coarsely punctate, pygidium much finer punctate than latter, both without distinct microsculpture (100x). Mesepimeral ridge shorter than interval between its end and mesocoxa. Metasternum without impressions, very finely and sparsely punctate, coarsely punctate on medio-apical portion. Mesocoxal area 0.06 mm long, margin arcuate, densely punctate. Metepisternum strongly narrowed anteriad, with straight margin. First ventrite without microsculpture, very finely punctate. Metacoxal area 0.09 mm long, with arcuate, rather coarsely punctate margin. Tibia moderately curved. Segments 1 to 3 of male protarsus weakly enlarged. Aedeagus (Fig. 134) 0.59 - 0.65 mm long. Median lobe with apical portion fairly wide, moderately long, at tip rounded; ventral process relatively large. Internal sac armed with robust flagellum; flagellum rather slender in apical third and with abruptly narrowed, very thin, transversaly bent end, in basal two thirds extended laterally by asymmetrical, more or less strongly sclerotized lamina. Parameres almost evenly slender from apex to moderately widened base, weakly curved apically.

R e m a r k s . This species may be readily distinguished from other members of the *subalpinum* group by the relative length of the antennomeres, especially by the very short segment IV in combination with weakly elongate segment XI.

Scaphisoma inquietum sp. n.

Holotype, male: Nepal, Parbat distr., Ghoropani Pass, N slope, 2700 m, 6.X.1983 (Löbl & Smetana) (MHNG).

Paratypes, 5: as holotype, 3 females; Mustang distr., 2 km N Kalopani, 2550 m, 1.X.1983 (Löbl & Smetana) (MHNG) 1 female; Jumla distr., Dzuga Khola Valley near Talphi, W Jumla, 3000-3500 m, 19.IX.1972 (Franz) (Coll. H. Franz) 1 male.

D i a g n o s i s . Member of the *subalpinum* group similar to *S. adjacens*. Median lobe of aedeagus gradually narrowed, flagellum widened basally and forming hook-shaped apophysis, parameres slender beyond middle.

D e s c r i p t i o n . Length 1.95 - 2.05 mm, width 1.32 - 1.37 mm. Very similar to *S. adjacens* and *S. uniforme*, differs from both in finer elytral and pronotal punctation. Latter almost indistinct at 24x magnification. Relative length of antennomeres as follows: III 6, IV 7, V 15, VI 21, VII 30, VIII 19, IX 26, X 25, XI 36 (holotype); IV conspicuously short, less than 2x as long as wide; V about 2.5x as long as wide; VI, VII, and XI each about 3x as long as wide; VIII as wide as VI, less than 3x as long as wide. Apical angle of elytron at same level as outer angle. Pygidium very finely punctate, propygidium with moderately fine punctures. Mesepimeral ridge somewhat shorter than interval between its end and mesocoxa. Metasternum with shallow medio-apical impressions, very finely and sparsely punctate, except for more coarsely punctate medio-apical area. Mesocoxal area 0.10 mm long, margin arcuate, finely punctate. Abdomen with microsculpture consisting of punctures. First ventrite very finely punctate. Metacoxal area 0.05 - 0.06 mm long,

inner margin arcuate, outer margin oblique. Tibia weakly curved. Segments 1 to 3 of male protarsus weakly widened. Aedeagus (Fig. 135) 0.57 - 0.62 mm long. Median lobe with basal bulb gradually narrowed; apical portion of median lobe almost indistinct in dorsal view, with very short, rather wide tip. Flagellum with wide base asymmetrically extended by a hook-like process, from base to about middle third gradually narrowed, in apical third very slender. Membranes of internal sac covered by distinct scales forming characteristic pattern. Parameres weakly sinuate, wide in basal third, then narrowed, in apical third notably narrower than near base.

R e m a r k s . This species may be readily distinguished from other members of the *subalpinum* group by its aedeagal characters. It also differs from most species by the conspicuously short antennomere IV.

Scaphisoma fratellum sp. n.

Holotype, male: Nepal, Taplejung distr., above Yamputhin, left bank of Kabeli Khola, bushes, open forest, 1800-2000 m, 27-29.IV.1988 (Martens & Schawaller) (SMNS).

Paratypes, 3: as holotype, 1 male, 2 females (SMNS, MHNG).

D i a g n o s i s . Body moderately large, without particular colour pattern. Antennomere IV very small. Elytron without basal stria. Abdominal microsculpture consisting of striae. Aedeagus symmetrical, with dorsal valve split, abruptly inclined apically and extended by short lamina. Internal sac complex, with robust medio-apical sclerite.

D e s c r i p t i o n . Length 1.55 - 1.75 mm, width 1.16 - 1.23 mm. Body black, apex of elytra yellowish or ochreous, apical abdominal segments and legs ochreous, antennae yellowish to pale brown. Relative length of antennommeres as follows: III 5, IV 6, V 11, VI 24, VII 28, VIII 15, IX 22, X 22, XI 42 (holotype); segment IV somewhat longer than wide; V about 2x as long as wide, VI and VII each about 4x as long as wide, VIII about 2.5x as long as wide, XI well 4x as long as wide. Pronotum with evenly arcuate lateral margins, lateral keels not visible in dorsal view; punctuation fine and very dense, punctures well delimited, near base somewhat larger than those on centre and near apex, barely visible at 12x magnification. Tip of scutellum exposed. Elytron with lateral margin oblique in middle; lateral keel visible near base only in dorsal view; apical margin arcuate; inner apical angle beyond level of outer angle; sutural angle not raised; sutural area flat, with a row of very fine punctures; sutural stria parallel to suture, not or barely curved near base; discal punctation very dense and rather coarse, most punctures well delimited, about as large as intervals; humeral area finely punctate. Pygidium with obsolete punctation. Mesepimeral ridge as long as or longer than interval between with end and mesocoxa. Metasternum without microsculpture, its median portion flattened apically, densely and finely punctate, punctation becoming gradually finer and sparser laterad. Mesocoxal area 0.05-0.06 mm long, margin arcuate and finely punctate. Metepisternum narrowed anteriad, at same level as metasternum, its suture rounded or oblique in middle. Abdominal microsculpture consisting of distinct transverse striae. First ventrite very finely, sparsely punctate. Metacoxal area 0.10 - 0.11 mm long, margin strongly arcuate, finely punctate. Tibia straight. Segments 1 to 3 of male protarsus strongly enlarged, 1 somewhat narrower than apex of protibia. Aedeagus (Fig. 136) 0.73 mm long. Median lobe with split valves, latter strongly inclined and sclerotized apically, and extended by horizontal, short, notched lobe covering ostium. Ventral process fairly large. Internal sac with robust, long medio-apical sclerite; small central membranous portion bearing short scales; proximal portion

long, bent basally, with more or less sclerotized long scales or denticle-like structures. Parameres straight from base to widened, incurved apical portion.

R e m a r k s . *Scaphisoma fratellum* is very similar to *S. fraterculum* Löbl in external characters but may be readily distinguished by the much longer antennae. Both species have very distinct aedeagi, that of *S. fratellum* has the ostium situated apically and covered by a dorsal lamina, the parameres simple, and the internal sac complex, in a similar way as in *S. aurorae*.

Scaphisoma aurorae sp. n.

Holotype, male: Nepal, Parbat distr., Pun Hill at Ghoropani Pass, 3050-3100 m, 8.X.83 (Löbl & Smetana) (MHNG).

Paratypes, 31: Parbat distr., as holotype, 1 female; Ridge E Ghoropani Pass, 3100 m, 7.X.1983 (Löbl & Smetana) (MHNG) 2 males, 10 females; Ghoropani Pass, N slope, 2750 m, 5.X.1983 (Löbl & Smetana) (MHNG) 3 males; Ghoropani Pass, 2850 m, 5.X.1983 (Löbl & Smetana) (MHNG) 1 male; Manang distr., Pisang, 3000 m, 3.X.1977 (Deharveng) (MHNG) 1 male; Ghorka distr., Chuling Khola, Djinski Kharka, 3400 m, 4.-5.VIII.1983 (Martens & Schawaller) (SMNS) 2 females; Myandi distr., S Dhaulagiri, Dhorpatan, 3000-3200 m, 16-24.V.1973 (Martens) (SMNS) 1 female; Sindhupalcok distr., between Ghopte and Thare Pati, 3250 m, 23.IV.1985 (Smetana) (MHNG) 1 male; above Shermathang, 2900 m, 26.IV.1981 (Löbl & Smetana) (MHNG) 1 female; Malemchi, 2900 m, 14.IV.1981 (Löbl & Smetana) (MHNG) 1 female; Patan distr., Phulcoki, 2600 m, 13.X.1983 (Löbl & Smetana) (MHNG) 1 female; Sankhua Sabha distr., between Romri La and Pahakhola, 3600-3450 m, 30.V.1988 (Martens & Schawaller) (MHNG) 1 male; Taplejung distr., Simbua Khola Valley, 3100-2900 m, 15.V.1988 (Martens & Schawaller) (SMNS) 1 female; same but near Tseram, 3250-3350 m, 10-15.V.1988 (SMNS, MHNG) 3 males, 1 female.

D i a g n o s i s . Body moderately large, with distinctive colour pattern. Antennomere IV slender. Basal stria of elytron complete. Abdominal microsculpture consisting of punctures and of very short striae. Median lobe of aedeagus abruptly inclined apically, with sclerotized valve. Internal sac bearing median sclerites. Parameres slender.

D e s c r i p t i o n . Length 1.65 - 1.85 mm, width 1.10 - 1.30 mm. Head and pronotum more or less dark reddish-brown or ochreous. Elytron (Fig. 27) yellowish, with blackish-brown or black base, and in most specimens with two small elongate dark central spots or with larger single dark central spot. Pygidium and propygidium with dark base and pale apices. Hypomeron and legs dark reddish-brown. Thorax and abdomen dark brown to black ventrally, yellowish apex of abdomen excepted. Antennae and tarsi yellowish. Relative length of antennomeres as follows: III 9, IV 15, V 20, VI 21, VII 26, VIII 23, IX 25, X 26, XI 33 (holotype); segments IV, V and VI each about 4x as long as wide; VII and XI each 3x as long as wide, VIII about 3.5x as long as wide. Pronotum with lateral margins arcuate, lateral keel not visible in dorsal view; punctation dense, fine and shallow, barely visible at 24x magnification. Tip of scutellum exposed. Elytron with oblique central portion of lateral margin, lateral keel in dorsal view visible only near base; apical margin truncate; inner apical angle at same level as outer angle; sutural margin not raised; sutural area raised, except anteriorly, with row of very fine punctures; sutural stria deep, moderately converging beyond middle, parallel to suture before middle, curved at base and extended laterally to forme uninterrupted basal stria joined with lateral stria; punctation almost evanescent near base, beyond basal third very dense, formed by rather large but very shallow punctures, usually larger than intervals. Pygidium very finely punctate, with microsculpture consisting of punctures and of very short striae. Mesepimeral ridge as long or somewhat longer than interval between its end and mesocoxa. Metasternum not microsculptured, with two median impressions, very finely

and sparsely punctate except for more distinctly punctate medio-apical portion. Mesocoxal area 0.05 mm long, its margin subtriangular or arcuate, rather coarsely punctate. Metepisternum strongly narrowed anteriad, with deep straight suture. First ventrite without microsculpture, with punctation sparse, very fine laterally, rather distinct on medio-basal portion. Metacoxal area 0.06-0.07 mm long, margin arcuate, rather coarsely punctate. Following ventrites with microsculpture consisting of punctures. Tibia straight. Segments 1 to 3 of male protarsus strongly enlarged, almost as wide as protibia. Segments 1 to 3 of male mesotarsus moderately enlarged. Aedeagus (Figs 137, 138) 0.78 mm. Median lobe with short, strongly inclined and tapering apical portion, tip visible only in lateral view, apex in dorsal view seemingly truncate. Internal sac long, complex, with two parallel median sclerites. Parameres arcuate, narrowed beyond basal third in dorsal view, evenly slender and almost straight in lateral view.

R e m a r k s . This species may be readily recognized by its colour pattern in combination with the complete basal stria of elytron. It is widely distributed for a species occuring only at high altitude.

Scaphisoma nima sp. n.

Holotype, male: Nepal, Mustang distr., Kalopani, 2550 m, 1.X.1983 (Löbl & Smetana) (MHNG).

Paratype, male: as holotype (MHNG).

D i a g n o s i s . Body moderately large, with distinct colour pattern. Antennomere IV short. Basal stria of elytron interrupted. Abdominal microsculpture consisting of striae. Aedeagus symmetrical, with small ventral process; internal sac lacking flagellum or robust sclerites; parameres slender, almost straight.

D e s c r i p t i o n . Length 1.65 - 1.75 mm, width 1.16 - 1.18 mm. Head, prothorax, femora and tibiae reddish-brown. Elytra ochreous with black basal spot extended on humeral area, and darkened along apical margins. Tarsi, antennae and apical abdominal segments ochreous. Venter of thorax and basal abdominal ventrites dark brown or blackish. Relative length of antennomeres as follows: III 5, IV 7, V 19, VI 24, VII 31, VIII 26, IX 28, X 27, XI 28 (holotype); segment IV small, about 2x as long as wide; V to VII each about 3.5x as long as wide; VIII almost 4x as long as wide. Pronotum with arcuate lateral margins; lateral keels not visible in dorsal view; punctation dense and very fine, distinct at 24x magnification. Tip of scutellum exposed. Elytron with very weakly arcuate lateral margin; lateral keel not visible in dorsal view; apical margin somewhat rounded; inner apical angle at same level as outer angle; sutural margin not raised; sutural area raised, very finely punctate; sutural stria weakly convergent from middle or from anterior third of sutural length toward apex, curved at base and extended toward humeral area, forming incomplete basal stria; discal punctation almost obsolete on basal fourth, from there gradually becoming denser and coarser, punctures in apical half large but shallow, larger than intervals. Pygidium extremely finely punctate, with microsculpture formed by transverse striae. Mesepimeral ridge longer than interval between its end and mesocoxa. Metasternum with two shallow medio-apical impressions, on median area finely and more or less densely punctate, laterally extremely finely and sparsely punctate; without microsculpture. Mesocoxal area 0.04 mm long, with arcuate, rather finely punctate margin. Metepisternum flat, barelly narrowed anteriad, its suture straight except at angles. Abdominal microsculpture consisting of distinct transverse striae absent from latero-basal portion of 1st ventrite. Punctation of 1st ventrite fine or very fine and sparse. Metacoxal

area 0.05 mm long, subparallel, marginal punctures rather coarse. Tibia straight. Segments 1 to 3 of pro- and mesotarsus moderately widened. Aedeagus (Fig. 139) 0.46 - 0.48 mm long. Apical portion of median lobe long, evenly wide, with rounded tip; dorsal valve situated near tip, weakly sclerotized. Basal half of internal sac covered by membranous scales, apical half with long spiny structures; sclerites absent except for thin straight median piece. Parameres almost straight, somewhat convergening, exceeding weakly tip of median lobe.

R e m a r k s . This species has the aedeagus similar to that of *S. notatum*, except for the basal portion of the internal sac which differs significantly. Both species differ drastically by their colour pattern.

Scaphisoma jado sp. n.

Holotype, male: Nepal, Sindhupalcok distr., Malemchi, 2800 m, 18.IV.1981 (Löbl & Smetana) (MHNG).

Paratypes, 15: Sindhulapcok distr., as holotype, 3 females; above Shermathang, 2900 m, 26.IV.1981 (Löbl & Smetana) (MHNG) 1 male, 3 females; below Thare Pati, 3300 m, 10.IV.1981 (Löbl & Smetana) (MHNG) 1 male, 2 females; Nuwakot distr., Trisuli Valley, Gosaikund, 3200 m, 23-26.IV.1973 (Martens) (SMNS, MHNG) 3 males, 2 females.

D i a g n o s i s . Body rather large, with conspicuous colour pattern. Antennomere IV slender. Elytron with complete basal stria. Abdominal microsculpture consisting of punctures. Aedeagus symmetrical, dorsal valve of median lobe deeply notched. Internal sac bearing robust sclerite expanded laterally by an apophysis and extended proximally by two slender arms. Parameres with strongly expanded base.

D e s c r i p t i o n . Length 1.80 - 2.10 mm, width 1.21 - 1.38 mm. Most of dorsal surface ochreous. Pronotum with large dark discal spot divided in two spots in some specimens. Elytron with large dark brown or black discal spot extended to sutural margin, and darkened along basal margin. Hypomeron ochreous. Thorax ventrally and abdominal ventrites 1 to 3 or 4 dark brown. Legs reddish-brown or ochreous, antennae ochreous to yellowish. Relative length of antennomeres as follows: III 10, IV 16, V 20, VI 20, VII 27, VIII 20, IX 25, X 25, XI 30 (holotype); segments IV to VI each about 4x as long as wide, VI and VII each about 3x as long as wide, XI not quite 3x as long as wide. Pronotum with evenly acruate lateral margins, lateral keels not visible in dorsal view; punctation fine, dense, more or less distinct at 24x magnification, punctures not well delimited. Tip of scutellum exposed. Elytron relatively strongly narrowed apically; lateral margin almost evenly arcuate; lateral keel not visible in dorsal view; apical margin truncate; inner apical angle exceeding level of outer angle; sutural margin not raised; sutural area raised beyond middle or beyond anterior third, very finely punctate; sutural stria deep, converging apically from mid-length of suture, parallel to suture in anterior half, curved at base and extended along base to forme complete basal stria joined with lateral stria; discal punctation dense and fine, with punctures decidedly larger than those of pronotum, many about as large as intervals but very shallow and indistinct on ochreous area. Pygidium very finely punctate, without visible (100x) microsculpture. Mesepimeral ridge shorter than interval between its end and mesocoxa. Metasternum without microsculpture, punctation very fine and sparse laterally, more dense and notably less fine on medio-apical portion. Mesocoxal area 0.04-0.05 mm long, margin arcuate and finely punctate. Metepisternum not or weakly narrowed anteriad, with deep straight suture. First ventrite without microsculpture, punctuation very fine and sparse, except on medio-basal area. Metacoxal area extremely narrow, parallel to coxa, its margin rather coarsely punctate. Apical

abdominal segments with microsculpture consisting of punctures. Tibia straight. Segments 1 to 3 of male pro- and mesotarsus moderately enlarged. Aedeagus (Figs 140, 141) 0.63 - 0.68 mm long. Median lobe with long apical portion; dorsal valve strongly sclerotized, deeply notched medially, almost as long as ventral piece; ventral piece strongly inclined, with curved, pointed tip; ventral process well developed. Internal sac armed with robust sclerite extended basally by two narrow arms and with a hook-shaped lateral process. Parameres with conspicuously widened base, gradually narrowed toward tip in lateral view.

R e m a r k s . This species can be readily distinguished from *S. notatum* by the aedeagal characters. Both species live at high altitudes; *S. jado* is possibly restricted to Central Nepal.

Scaphisoma invalidum sp. n.

Holotype, male: Nepal, Sankhua Sabha distr., Arun Valley, Chichila, 2200 m, 24.IV.1984 (Löbl & Smetana) (MHNG).

D i a g n o s i s . Body moderately large, with distinct colour pattern. Antennomere IV elongate. Elytron without basal stria. Hypomeron, metasternum and abdomen with microsculpture consisting of striae. Aedeagus symmetrical, with single dorsal valve. Ventral process well developed. Internal sac bearing median sclerite and apical rows of denticles.

D e s c r i p t i o n . Length 1.70 mm, width 1.05 mm. Pronotum and hypomera ochreous, former with somewhat darkened centre on each side of pale median line. Elytron yellowish, with black basal spot extended apically to forme a triangular spot, and with blackish apical transverse fascia. Venter of thorax and basal abdominal ventrites dark brown. Apical abdominal segments, legs and antennomeres IV to XI yellowish. Relative length of antennomeres as follows: III 6, IV 15, V 23, VI 23, VII 26, VIII 21, IX 24, X 22, XI 32; segments IV and VI about 4x as long as wide; V almost 5x as long as wide; VII 3x as long as wide; VIII and XI each somewhat more than 3x as long as wide. Pronotum with evenly arcuate lateral margins, lateral keels not visible in dorsal view; punctation dense and very fine, visible at 12x magnification. Tip of scutellum exposed. Elytron with lateral keel visible in dorsal view only near base; apical margin truncate; inner apical angle exceeding level of outer angle; sutural margin not raised, sutural area flat, with dense row of rather coarse punctures; sutural stria parallel to suture, curved near base, not extended laterad of pronotal lobe, punctation fine and rather sparse near base, dense and rather coarse elsewhere, most punctures larger than intervals. Pygidium extremely finely punctate, with distinct microsculpture consisting of transverse striae. Hypomeron, mesepisternum, metasternum, metepisternum, and ventrites with microsculpture consisting of striae. Metasternum, except median portion, sparsely and extremely finely punctate; punctures of median portion becoming gradually larger apically. Mesocoxal area 0.04 mm long, with margin arcuate, rather finely punctate. Metepisternum vaulted, suture weakly sinuate. First ventrite sparsely and very finely punctate. Metacoxal area 0.09 mm long, large, its margin strongly arcuate, finely punctate. Protibia straight, mesotibia weakly curved, metatibia weakly sinuate. Aedeagus (Figs 142, 143) 0.57 mm long. Median lobe with slender, arcuate, apical portion pointed in lateral view; ventral process distinctly protruding apically. Internal sac slender, with simple, sinuate median sclerite, two apical groups of small sclerotized denticles, and most of membranes covered by scales.

R e m a r k s . This species may be readily distinguished by its colour pattern in combination with the microsculptured hypomeron. The aedeagus resembles that of *S.*

aurorae by the median lobe having a single dorsal valve, the internal sac armed with a median sclerite and by the narrow parameres. The colour pattern is very similar to that of *S. bhareko* and *S. sikkimense*.

Scaphisoma baloo sp. n.

Holotype, male: Nepal, Patan distr., Phulcoki, 2650 m, 15.X.1983 (Löbl & Smetana) (MHNG).

Paratypes, 109: Nepal, as holotype, 5; same but 2700 m, 17; same but 2600 m, 14-16.X.1983, 23; same but 2550 m, 29.X.1984, 14; same but 2500 m, 30.IV.1984, 15; same but 2300 m, 10.IV.1981 (Löbl) 3; Phulcoki, 2600-2650 m, 14.V.1980 (Martens & Ausobsky) (SMNS) 1; Phulcoki, 2600 m, 20.IV.1982 (A. & Z. Smetana) (MHNG) 14; Phulcoki, 21.II.1970 (Franz) (Coll. H. Franz, MHNG) 14; Phulcoki, summit, 4.X.1971 (Franz) (Coll. H. Franz, MHNG) 3.

D i a g n o s i s . Body rather large, with distinct colour pattern. Antennomere IV long. Elytra conspicuously narrowed apically, with entire basal striae. Metacoxal area very narrow, largest near metepimeron. Aedeagus symmetrical, with single valve and large protruding ventral process. Internal sac with robust median sclerite and basal setose structures. Parameres with wide base, narrowed toward apical third.

D e s c r i p t i o n . Length 2.0 - 2.2 mm, width 1.38 - 1.60 mm. Body dark reddish, elytron darkened subapically and with wide yellowish apical portion (Fig. 28). Apex of abdomen yellowish, legs and antennae yellowish or ochreous. Relative legths of antennomeres as follows: III 12, IV 18, V 23, VI 24, VII 30, VIII 25, IX 28, X 28, XI 30; segment III conspicuously elongate, IV, V and VI each about 5x as long as wide; VII 3x as long as wide; VIII about 3.5x as long as wide; XI less than 3x as long as wide. Pronotum with strongly arcuate lateral margins; lateral keels not visible in dorsal view, basal lobe reduced; discal punctation very fine, barely visible at 100x magnification. Scutelum completely or almost completely covered by pronotal lobe. Elytron strongly narrowed apically; lateral margin arcuate in anterior half, oblique beyond middle; apical margin truncate; inner apical angle disinctly exceeding level of outer angle; sutural margin not raised; sutural area flat, conspicuously narrow; sutural stria parallel to suture, curved at base and extended laterally, forming uninterrupted, very fine (almost obsolete) basal stria; discal punctation very fine, punctures extremely shallow, much larger than those on pronotum but usually barely visible at 50x magnification. Mesepimeral ridge indistinct. Metasternum without any impression, not microsculptured; punctation of lateral portion very fine and sparse, dense and distinct at each side of median line. Mesocoxal area 0.05 mm long, with arcuate, finely punctate margin. Metepisternum moderately narrowed anteriad, with suture rounded only at anterior angle, notably deep, widened apically. Abdomen with microsculpture consisting of punctures. First ventrite with middle portion rather densely and fairly finely punctate, lateral portion very finely and sparsely punctate. Metacoxal area very narrow, widening toward metepimeron, with weakly oblique margin. Tibiae straight. Segments 1 to 3 of male pro- and mesotarsi distinctly enlarged. Aedeagus (Figs 144, 145) 0.69 - 0.74 mm. Distal portion of median lobe long, tapering, weakly inclined, with ventral margin sinuate in lateral view; single dorsal valve relatively strongly sclerotized; ostium situated near tip. Ventral process strongly expanded apically. Internal sac with robust, strongly sclerotized piece; membranes in basal half with very fine, dense setose structures. Parameres with wide base, in dorsal view gradually narrowed toward weakly curved apical portion, in lateral view almost straight and evenly wide from tip to level of ventral process.

R e m a r k s . This species may be easily distinguished by its colour pattern in combination with the apically strongly narrowed elytra, and with the very narrow

metacoxal area. The aedeagal characters suggest possible close relationship with *S. aurorae* and *S. invalidum*. *Scaphisoma baloo* has reduced wings and appears to be endemic to Phulcoki. Most of the specimens were found in moist plant debris along fallen oak logs.

Scaphisoma clavigerum sp. n.

Holotype, male: Nepal, Panchthar distr., Dhorpar Kharka, 2700 m, *Rhododendron-Lithocarpus* forest, 13-16.IV.1988 (Martens & Schawaller) (SMNS).

Paratypes, 4: Nepal, as holotype (MHNG) 1 male; India, West Sikkim, Choka, 3050 m, nr. Yuksam, 24.IX.1983 (Sakai) (Coll. M. Sakai, MHNG) 3 females.

D i a g n o s i s . Rather large species, with distinct colour pattern. Antennomere IV slender. Basal stria of elytron uninterrupted. Abdominal microsculpture consisting of striae. Aedeagus with strongly sclerotized dorsal valve exceeding level of ventral piece of median lobe. Internal sac bearing robust median sclerite. Parameres with subapical apophysis.

D e s c r i p t i o n . Length 1.9 - 2.1 mm, width 1.30 - 1.45 mm. Head, most of pronotal and elytral surface, apical abdominal segments, antennae, tibiae, tarsi and most of femora ochreous or yellowish. Pronotum with two dark brown or blackish discal spots(Fig. 29). Elytral base and venter of thorax dark brown or black, pale hypomeron and metepimeron excepted. Base of femora darkened. Relative length of antennomeres as follows: III 10, IV 17, V 23, VI 30, VII 37, VIII 31, IX 38, X 35, XI 37 (holotype); segments IV, V and VII each almost 4x as long as wide, VI and VIII somewhat more than 4x as long as wide, XI almost 3.5x as long as wide. Pronotal margins arcuate, lateral keels not or barely visible in dorsal view; discal punctation dense and very fine, visible at 50x magnification. Tip of scutellum exposed. Elytron with middle portion of lateral margin oblique; lateral keel in dorsal view visible near base only; apical margin trunctate; inner apical angle exceeding level of outer angle; sutural margin raised; sutural area vaulted, with row of very fine punctures; sutural stria parallel to suture, curved near base and extended laterad to forme uninterrupted, relatively deep basal stria joined with lateral stria; punctation dense, punctures shallow, rather large, diameters mostly as large as or larger than diameters of intervals, punctures near base much smaller than intervals and extremely shallow. Pygidium with sparse and extremely fine punctation. Mesepimeral ridge longer than interval between its end and mesocoxa. Metasternum not microsculptured; finely, very densely punctate on deeply impressed medio-apical portion, elsewhere sparsely and very finely punctate. Mesocoxal area very narrow, about 0.02 mm long, parallel, finely punctate margin. Metepisternum flat, at same level as metasternum, narrowed anteriad, with straight suture. Abdomen with microsculpture consisting of transverse striae. First ventrite with very fine and sparse punctation, except less finely and more densely punctate medio-basal area. Metacoxal area 0.05 - 0.06 mm long, margin finely punctate, arcuate medially, oblique laterally. Tibia straight, pro- and mesotibia stouter apically. In male, segments 1 to 3 of protarsus conspicuously widened, 1 wider, 2 as wide as, 3 somewhat narrower than apex of tibia; segment 1 and 2 of mesotarsus strongly widened, 1 as wide as, 2 narrowed than, apex of tibia, 3 weakly widened. Aedeagus (Figs 146-148) 1.08 mm long. Median lobe gradually narrowed apically, with single, relatively strongly sclerotized dorsal valve, extended to level of tip of parameres; ventral piece short, strongly inclined, with narrow apex. Internal sac armed by robust median sclerite with basal portion extended laterally; membranes bearing small scales. Parameres robust, each somewhat

sinuate in dorsal view, arcuate in lateral view, with wide base and distinct sub-basal apophyse in ventral view.

R e m a r k s . This species may be readily distinguished by the conspicuous colour pattern in combination with the uninterrupted basal stria of the elytron and abdominal microsculpture. It is well characterized by the shape of the parameres and by the unusually long dorsal valve of the median lobe.

Scaphisoma pinnigerum sp. n.

Holotype, male: Nepal, Patan distr., Phulcoki, near Godawari, 1700 m, 10.V.1981 (Löbl) (MHNG).

Paratype, male: Patan distr., Phulcoki, 2350 m, X.1977 (Deharveng) (MHNG).

D i a g n o s i s . Member of the *haemorrhoidale* group. Body reddish-brown, elytron paler only at apical margin. Metasternum with distinct row of dense punctures parallel to metaxoca. Abdominal microsculpture consisting of striae. Internal sac of aedeagus bearing two central teeth, medio-apical tube covered by denticles and wide basal duct. Parameres with wide inner lobe.

D e s c r i p t i o n . Length 1.85 mm, width 1.20 mm. Body reddish-brown, elytra with very narrow pale apical area; apical abdominal segments, legs and antennae ochreous or yellowish. Antennae similar to those of other species of the group. Pronotum with lateral margins weakly arcuate; lateral keels visible in dorsal view; punctation very fine, barely visible at 12x magnification. Tip of scutellum exposed. Elytron with lateral margin almost evenly arcuate; lateral keel distinct in dorsal view; apical margin arcuate, inner apical angle exceeding level of outer angle; sutural margin barely raised; sutural area flat near base, somewhat vaulted beyond basal third, very finely punctate; sutural stria gradually, weakly diverging from sutural margin anteriad; entire discal punctation dense and coarse, most punctures larger than or as large as intervals; surface along lateral stria impunctate. Pygidium extremely finely punctate. Mesepimeral ridge longer than interval between its end and mesocoxa. Metasternum without microsculpture; medio-apical portion flattened, very densely, rather coarsely punctate, punctation on centre gradually finer and sparser anteriad. Most of lateral portion of metasternum very finely and sparsely punctate; row of rather coarse punctures parallel to metacoxa very dense, accompanied by additional punctures. Mesocoxal area 0.06 mm long, margin arcuate, rather finely punctate. Metepisternum narrowed anteriad, impressed below level of metasternum, suture straight except on rounded angles. Abdomen with microsculpture consisting of distinct transverse striae. First ventrite sparsely and very finely punctate, several punctures on medio-basal portion somewhat larger. Tibia straight. Segments 1 to 3 of protarsus and segment 1 of mesotarsus rather strongly widened in male. Aedeagus (Fig. 152) 0.44 mm long. Dorsal valves of median lobe rather long and wide, rounded at tip. Internal sac armed with two conspicuous, strongly sclerotized teeth converging anteriad, their base widened and raised; membranes forming long median tube with denticles becoming larger apicad; membranous portion proximal of central teeth covered by small scale-like structures, followed by striate scructure overlapping anterior end of relatively wide basal duct. Parameres curved apically, with wide inner lobe.

R e m a r k s . This species is very similar to *S. indra* from which is difficult to be distinguish by its external characters. However, it may be readily recognised by the structures of the internal sac, especially by the presence of a pair of central sclerotized teeth, in combination with the wide basal duct.

Scaphisoma varians sp. n.

Scaphisoma cf. *bedeli*; LÖBL 1986a: 205.

Holotype, male, Nepal, Sankhua Sabha distr., forest S Mangsingma, 2200 m, 11.IV.1984 (Löbl & Smetana) (MHNG).

Paratypes, 135: as holotype, 14 males, 12 females; Induwa Khola Valley, 2000-2100 m, 16-17.IV.1984 (Löbl & Smetana) (MHNG) 12 males, 10 females; below Sheduwa, 2550 m, 30.III.1982 (A. & Z. Smetana) (MHNG) 1 male, 1 female, and same but 2100-2550 m, 9.IV.1982, 1 female; forest NE Kuwapani, 2600 m, 15.IV.1982 (A.& Z. Smetana) (MHNG) 5 males, 8 females; Chichila, 2200 m, 4.IV.1984 (Löbl & Smetana) (MHNG) 1 male; Chichila, 2300 m, 26.III.1982 (A. & Z. Smetana) (MHNG) 2 males; Ilam distr., Mai Pokhari, 2100-2200 m, 9-10.IV.1988 (Martens & Schawaller) (SMNS, MHNG) 3 males, 1 female; India, Sikkim, "Rümtek", ca 2100 m, XI.1981 (Cassagnau) (MHNG) 1 male, 1 female; West Bengal, Darjeeling distr., Algarah, 1800 m, 9.X.1978 (Besuchet & Löbl) (MHNG) 1 male; 3 km N Teesta, 250 m, 10.X.1978 (Besuchet & Löbl) (MHNG) 1 male; betw. Algarah and Labha, 7 km from Algarah, 1900 m, 11.X.1978 (Besuchet & Löbl) (MHNG) 33 males, 32 females.

For additional material from the Darjeeling district see LÖBL (1986a).

D i a g n o s i s . Member of the *haemorrhoidale* group. Body more or less dark reddish-brown, wide apical portion of elytra and apical abdominal segments paler. Metasternum with sparse row of relatively fine punctures parallel to metacoxa. Abdominal microsculpture consisting of striae. Aedeagus with short pointed dorsal valves of median lobe; Internal sac with two rows of strongly sclerotized, long denticles and with long membranous portion bearing scale-like and denticulate structures.

R e m a r k s . This species was characterized and figured in LÖBL (1986a). It was hold for possibly conspecific with *S. bedeli* of which type material has been subsequently examined .

Scaphisoma alacre sp. n.

Holotype, male: Nepal, Sindhupalcok distr., Malemchi, 2800 m, 14.IV.1981 (Löbl & Smetana) (MHNG).

Paratypes, 114: Mustang distr., Lete, 2550 m, 2.X.1983 (Löbl & Smetana) (MHNG) 18 males, 12 females; Kali Gandaki Khola, betw. Mishi and Gomone, 21.IX.1971 (Franz) (Coll. H. Franz, MHNG) 2 females; forest N Lete, 24.IX.1971 (Franz) ((Coll. H. Franz, MHNG) 3 males, 3 females; Lete, 2450-2600 m, 30.IV.1980 (Martens & Ausobsky) (SMNS) 2 males, 1 female; Lete, 24.IX.1971 (Franz) (Coll. H. Franz) 1 female; betw. Lete and Gasa, 25.IX.1971 (Franz) (Coll. H. Franz) 1 male, 4 females; above Shika, 26.IX.1971 (Franz) (MHNG) 2 males; Parbat distr., Chitre, 2400 m, 4.V.1980 (Martens & Ausobsky) (SMNS) 1 male, 1 female; N Ghoropani Pass, 2750 m, 5.X.1983 (Löbl & Smetana) (MHNG) 2 males; Ghoropani Pass, N slope, 2700 m, 6.X.1983 (Löbl & Smetana) (MHNG) 4 males, 2 females; Ghoropani Pass, 2850 m, 5.X.1983 (Löbl & Smetana) (MHNG) 1 female; Rasuwa distr., Dunche, 21-26.IX.1981 (Pawlowski & Kuska) (IZK) 1 male, 2 females; Langtang Khola Valley, 1950 m, 13.IV.1985 (Smetana) (MHNG) 3 males; 1 km NE Bhargu, 2000 m, 12.IV.1985 (Smetana) (MHNG) 1 female; above Bokhajhundo, 1950 m, 11.IV.1985 (Smetana) (MHNG) 1 male; Sindhupalcok distr., Malemchi, as holotype, 16 males, 26 females; Chaubas, 2600 m, 5.IV.1981 (Löbl & Smetana) (MHNG) 2 males, 1 female; Patan distr., Phulcoki, 2600 m, 13.X.1983 (Löbl & Smetana) (MHNG) 1 male.

D i a g n o s i s . Rather large-sized member of the *haemorrhoidale* group, with abdominal microsculpture consisting of striae, metasternum with row of punctures parallel to metasternum, discal punctures of elytra well delimited, coarse. Median lobe of aedeagus with slender apical arms of dorsal valves; internal sac with two rows of sclerotized teeth; parameres abruptly widened and moderately curved apically.

D e s c r i p t i o n . Length 1.7 - 1.9 mm, width 1.10 - 1.30 mm. Colour variable, head, pronotum, ventral surface of thorax and basal abdominal ventrites usually dark brown to black, pronotum uniformly more or less dark, or reddish-brown with darkened centre. Elytra in basal 2/3 reddish, usually darkened near sutural striae, sometimes darkened along basal margin and beyond middle; apical third yellowish or ochreous, usually well delimited. Apical abdominal segments, legs and antennae yellowish or ochreous. Antennae with segments IV to XI slender, similar to those of other species of the group. Pronotum with evenly, weakly arcuate lateral margins, lateral keels not visible in dorsal view; punctation dense and fine, well delimited, near base visible at 12x magnification, on centre visible at 20x magnification. Tip of scutellum exposed. Elytron with basal margin weakly arcuate in basal third, then oblique; lateral margin usually not visible in dorsal view, sometimes distinct in apical third; apical margin truncate; inner apical margin exceeding level of outer angle; sutural margin not raised; sutural area flat, with row of fine punctures; sutural stria very weakly converging apically, somewhat curved at base, not extended laterad; discal punctation dense and coarse, punctures well delimited, most distinctly larger than intervals. Pygidium extremely finely punctate. Mesepimeral ridge longer than interval between its end and mesocoxa. Metasternum not microsculptured. Median portion of metasternum flattened and impressed apically, bearing very dense, rather coarse punctation becoming gradually sparser and finer anteriad. Lateral portion of metasternum with dense row of moderately coarse punctures parallel to metacoxa, with several additional distinct punctures, and with very fine, sparse punctation on most of surface; transverse row not impressed. Mesocoxal area 0.06-0.09 mm long, its margin arcuate, rather finely punctate. Metepisternum moderately narrowed anteriad, near suture impressed below level of metasternum, suture straight except at rounded angles. Abdominal segments with microsculpture consisting of transverse striae. Entire first ventrite sparsely and very finely punctate. Metacoxal area 0.09-0.10 mm long, with arcuate, rather coarsely punctate margin. Tibia straight. Segments 1 and 2 of male pro- and mesotarsus strongly widened, segment 3 moderately widened. Aedeagus (Fig. 153) 0.82 - 0.92 mm long. Dorsal valves with short slender apical arms, ventral piece of median lobe denticulate apically. Internal sac with two apical rows of sclerotized teeth, its central membranous portion very finely denticulate, followed proximally by portion containing long, weakly sclerotized denticles; membranes of basal portion covered by scale-like structures. Parameres straight from base to abruptly widened and moderately curved apical portion, with minute subapical lobe.

R e m a r k s . This species may be readily distinguished by the shape of the parameres of the aedeagus. Most specimens may be identified by their colour pattern, in combination with the well delimited discal punctures of the elytra and the relatively fine punctures forming the transverse metasternal row.

Scaphisoma nepalense sp. n.

Holotype, male: Nepal, Sindhupalcok distr., Pokhare NE Barahbise, 2700 m, 7.V.1981 (Löbl & Smetana) (MHNG).

Paratypes, 181: as holotype, and from 2800 m, 2 -3.V.1981, 98 males, 79 females; Durumtali near Barahbise, via Ting Sang La, 2200-2300 m, 5.VIII.1970 (Franz) (Coll. H. Franz) 3 males, 1 female.

D i a g n o s i s . Medium-sized member of the *haemorrhoidale* group, with pale apical portion of elytra. Lateral portion of metasternum with transverse row of punctures. Abdominal microsculpture consisting of striae. Aedeagus with slender arms of dorsal

valves. Internal sac with central, weakly sclerotized arcuate plate followed by two rows of teeth.

D e s c r i p t i o n . Length 1.55 - 1.85 mm, width 1.0 - 1.20 mm. Body more or less dark reddish-brown, rarely blackish. Apical fourth to third of elytron yellowish, elytral disc darkened at anterior margin of pale apical area in some specimens. In external characters very similar to *S. varians*, but elytral punctation less dense and somewhat finer, with most discal punctures about as large as or notably smaller than intervals. Lateral portion of metasternum with distinct transverse row of fine punctures. Aedeagus (Figs 154, 155) 0.71 - 0.74 mm long. Median lobe with slender, apically narrowed arms of dorsal valves; ventral piece long. Internal sac with basal membranes covered by scale-like structures, followed by longer denticles; central portion with elongate, arcuate plate with sinuate apical margin, more strongly sclerotized at lateral margins. Apical portion of internal sac bearing two rows of teeth. Parameres weakly widened at middle, each incurved apically.

R e m a r k s . This species may be readily recognised by the shape of the parameres in combination with the characters of the internal sac of the aedeagus.

Scaphisoma kanchi sp. n.

Holotype, male: Nepal, Sankhua Sabha distr., bottom Arun Valley below Num, 1050 m, 20.IV.1984 (Löbl & Smetana) (MHNG).

Paratypes, 17: as holotype, and from 21.IV.1984, 6 males, 3 females; Arun river at Num, 1500 m, 29.III.1982 and 1500-1600 m, 10.IV.1982 (A. & Z. Smetana) (MHNG) 6 males, 2 females.

D i a g n o s i s . Medium-sized species of the *haemorrhoidale* group with pale apical portion of elytron. Metasternum with row of punctures parallel to metacoxa. Abdominal microsculpture consisting of transverse striae. Aedeagus with distal arms of dorsal valves rather wide and short. Internal sac denticulate in central portion and with spine-like structures in apical portion.

D e s c r i p t i o n . Length 1.55 - 1.85 mm, width 1.0 - 1.20 mm. Body dark reddish brown to black, apical fourth of elytron and apical abdominal segments ochreous. In external characters very similar to previous species. Elytron with sutural stria somewhat more converging apically and with discal punctures less delimited. Punctures forming transverse row parallel to metacoxa rather coarse, situated in impressed stria. Aedeagus (Figs 156, 157) 0.79 - 0.81 mm long. Apical portion of median lobe strongly tapering; arms of dorsal valves almost evenly wide. Internal sac with long basal portion divided into two membranous parts covered by fine denticulate structures; centre with a wide tooth accompanied by strongly sclerotized lateral teeth; apical portion of internal sac bearing strong spine-like structures. Parameres strongly narrowed beyond basal third, arcuate, with weakly sclerotized, uneven inner margin.

R e m a r k s . This species may be readily distinguished by the aedeagal characters. It differs from *S. nepalense*, *S. prehensor*, *S. alacre*, and *S. varians* by the transverse row of metasternal punctures situated in an impressed stria.

Scaphisoma coalitum sp. n.

Holotype, male: Nepal, Ilam distr., betw. Hunse and Mai Pokhari, 1600-2000 m, open land, 9.IV.1988 (Martens & Schawaller) (MHNG).

D i a g n o s i s . Member of the *haemorrhoidale* group. Body black, large apical portion of elytron pale. Elytral punctation coarse. Metasternum with distinct transverse row of punctures along metacoxa. Abdominal microsculpture consisting of striae. Aedeagus with slender sinuate parameres bearing minute lobe, internal sac armed by apical teeth.

D e s c r i p t i o n . Length 1.7 mm, width 1.18 mm. Body black, apical fourth of elytra, apical abdominal segments, antennae and legs ochreous to yellowish. Antennae similar to those of other species of the group. Pronotum with lateral margins weakly arcuate; lateral keels not visible in dorsal view; punctation very fine, distinct at 24x magnification. Tip of scutellum exposed. Elytron with lateral margin arcuate in basal third, almost straight beyond basal third; lateral keel visible in dorsal view from base to apex; apical margin truncate; inner apical angle exceeding level of outer angle; sutural margin not raised, sutural area flat, finely punctate; sutural stria weakly diverging from base to anterior third, then parallel to suture, curved along pronotal lobe; discal punctation coarse and dense, most punctures deep, well delimited, larger than or as large as intervals; punctures near sutural stria and apical margin finer. Pygidium extremely finely punctate. Mesocoxal ridge longer than interval between its end and mesocoxa. Metasternum without microsculpture; lateral portion with dense row of rather coarse punctures parallel to metacoxa and with several additional, rather coarse punctures situated close to metacoxa, elsewhere very finely punctate. Medio-apical portion of metasternum weakly impressed, rather densely and distinctly punctate. Mesocoxal area 0.07 mm long, its margin arcuate, finely punctate. Metepisternum narrowed anteriad, impressed along suture, latter rounded only at angles. Abdomen with microsculpture consisting of transverse striae, absent from latero-basal portion of 1st ventrite. First ventrite very finely punctate laterally, with distinct punctures on median portion. Metacoxal area 0.10 mm long, with strongly arcuate, rather coarsely punctate margin. Tibia straight. Segments 1 to 3 of male pro- and mesotarsus widened. Aedeagus (Figs 158-160) 0.86 mm long. Median lobe with short, apically rounded dorsal valves; tip of ventral piece of median lobe truncate in dorsal view. Internal sac bearing several sclerotized apical teeth, subapical sclerotized laminae, scale-like and setose structures covering long membranous portion. Parameres conspicuously slender and sinuate.

R e m a r k s . This species is possibly closely related with *S. incurvum* Löbl from Thailand with which it shares sinuate parameres. It may be distinguished from this by the characters of the internal sac and by the coarser elytral punctation. *Scaphisoma coalitum* resembles particularly *S. minax*, but both species exhibit very distinct aedeagi.

Scaphisoma sikkimense sp.n.

Holotype, male: India, Sikkim (West), Choka, 3050 m, nr. Yuksam, 25.IX.1983 (Sakai) (NSMT).

Paratypes, 2: Sikkim (West), Chaozing - Bakkim nr. Yuksam, 2200 - 2670 m, 12.IX.1983 (Sakai) (MHNG) 1 female; Sikkim (West), Bakkim - Choka nr. Yuksam, 2670 - 3050 m, 13.IX.1983 (Sakai) (MHNG) 1 female.

D i a g n o s i s . Member of the *haemorrhoidale* group, with dark triangular elytral spot and metasternum lacking transverse row of punctures parallel to metacoxa. Aedeagus with internal sac bearing two converging subapical teeth, parameres with tuberculate outer margin.

D e s c r i p t i o n . Length 1.80 - 1.95 mm, width 1.20 - 1.25 mm. Head and pronotum, including hypomeron, more or less dark reddish-brown. Elytron ochreous or

yellowish, with dark brown to blackish triangular basal spot extended at suture to mid-length of elytron. Ventral surface of thorax and 1st abdominal ventrite about as dark as elytral base, following ventrites yellowish or ochreous. Legs and antennae pale reddish brown or yellowish. Antennae similar to those of other species of the *haemorrhoidale* group. Pronotum with lateral margins arcuate; lateral keel not visible in dorsal view; punctation moderately dense and very fine, barely visible at 24x magnification on most of discal surface, decidedly coarser and more dense near base, many punctures there larger than intervals. Apical portion of scutellum exposed. Elytron with central portion of lateral margin oblique; lateral keels visible in dorsal view only near base; apical margin weakly rounded; inner apical angle exceeding level of outer angle; sutural margin not raised; sutural area flat, with row of very fine punctures; sutural stria weakly converging apically, somewhat curved near base, not extended laterally; discal punctation very dense, rather fine, very shallow, most punctures larger or about as large as intervals, near lateral margin much finer than on centre. Pygidium with microsculpture consisting of transverse striae, extremely finely punctate. Mesepimeral ridge longer than interval between its end and mesocoxa. Metasternum not microsculptured, without medio-apical impression, punctation sparse and very fine on lateral portion, more dense and less fine on middle portion. Metacoxal area 0.05-0.06 mm long, with arcuate, finely punctate margin. Metepisternum flat, weakly narrowed anteriad, somewhat impressed below level of metasternum, suture weakly sinuate to straight with rounded anterior angle. First ventrite very finely punctate, without microsculpture on latero-basal portion, elsewhere with microsculpture consisting of transverse striae. Metacoxal area strongly arcuate, 0.09 mm long, with rather fine marginal punctures. Tibia slender, straight. Segments 1 to 3 of male protarsus notably widened, narrower than apex of protibia. Aedeagus (Figs 161, 162) 0.80 mm long. Median lobe with slender apical portion, dorsal valves short, rather wide. Internal sac complex, with finely denticulate membranes, bearing a pair of subapical, converging teeth and a pair of sub-basal lamellar structures. Parameres weakly curved apically, with tuberculate outer margin, and elongate, narrow inner lobe.

R e m a r k s . This species may be distinguished from other members of the group by its colour pattern in combination with the tuberculate outer margin of the parameres and the shape of the sclerotized teeth of the internal sac of the aedeagus.

Scaphisoma bhareko sp. n.

Holotype, male: Nepal, Patan distr., Phulcoki, 2500 m, 10.V.1981 (Löbl) (MHNG).

Paratypes, 307: Nepal, Jumla distr., Dzunda Khola Valley, near Talphi, 3000-3500 m, 19.IX.1972 (Franz) (Coll. H. Franz, MHNG) 4; Mustang distr., 2 km N Kalopani, 2550 m, 1.X.1983 (Löbl & Smetana) (MHNG) 3; Manang distr., Latha Manang W Bagarchhap, 2350-2450 m, 22-23.IX.1983 (Löbl & Smetana) (MHNG) 58; forest W Bagarchhap, 2200 m, 21.IX.1983 (Löbl & Smetana) (MHNG) 41; Parbat distr., Ghoropani Pass, 2700 and 2850 m, 5. and 6.X.1983 (Löbl & Smetana) (MHNG) 16; Ghoropani Pass, N slope, 2700-2750 m, 5. and 6.X.1983 (Löbl & Smetana) (MHNG) 43; ridge E Ghoropani Pass, 3100 m, 7.X.1983 (Löbl & Smetana) (MHNG) 2; Kaski distr., Dhumpus - Kare near Pokhara (Franz) (Coll. H. Franz) 1; Kathmandu distr., Nagarjung, Jamacok, 1900-2000 m, 18.VIII.1983 (Martens & Schawaller) (SMNS) 1; Siwapuri, 2540 m, 7.X.1981 (Sakai) (Coll. M. Sakai) 3; Siwapuri, 2700 m, 24.III.1982 (Rougemont) (MHNG) 2; Siwapuri, 2500 m, 1.V.1985 (Smetana) (MHNG) 1; Patan distr., Godawari, 6000 ft., 7-13.VIII.1967 (Canad. Nepal Exp.) (CNC) 1; Godawari, Phulcoki, 1770 m, 19.III.1980 (Martens & Ausobsky) and 1700 m, 10.V.1981 (Löbl) (MHNG) 4; Godawari, 13.III.1981 (Rougemont) 1; SE Godawari, cca 1800 m, 22.IV.1988 (Brachat) (MHNG) 1; Phulcoki (Franz) (MHNG) 1; Phulcoki, 2500-2700 m, 10.V.1981, 14-15.X.1983, 28-29.IV.1984 (Löbl & Smetana) (MHNG) 46; Sindhupalcok distr., near

Shermathang, 1980 (Franz) (Coll. H. Franz) 2; Chaubas, 2500 m, 4.IV.1981 (Löbl & Smetana) (MHNG) 1; Gul Bhanjyang, 2600 m, 6.IV.1981 (Löbl & Smetana) (MHNG) 2; Malemchi, 2800 m, 14.IV.1981 (Löbl & Smetana) (MHNG) 6; Pokhare NE Barahbise, 2600 and 2700 m, 2., 3. and 7.V.1981 (Löbl & Smetana) (MHNG) 16; Sankhua Sabha distr., forest NE Kuwapani, 2500-2550 m, 11-13. and 15.IV.1982 (A. & Z. Smetana) (MHNG) 4; same but 2350 m, 5.IV.1984 (Löbl & Smetana) (MHNG) 8; Chichila, 2300 m, 26.III.1982 (A. & Z. Smetana) (MHNG) 2; Chichila-Mure, 1900 m, 24.V.1980 (Wittmer) (NMB) 3; Chichila, 2200 m, 24.IV.1984 (Löbl & Smetana) (MHNG) 10; betw. Mure and Hurure, 2050-2150 m, 9-17.VI.1988 (Martens & Schawaller) (SMNS) 4; above Pahakhola, 2600-2800 m, 31.V.1988 (Martens & Schawaller) (SMNS) 1; Induwa Khola Valley, 2100 m, 17.IV.1984 (Löbl & Smetana) (MHNG) 2; Ilam distr., Gitang Khola Valley, 1750 m, 13.IV.1988 m, (Martens & Schawaller) (SMNS) 1; Taplejung distr., SE Yamputhin to Yamputhin, 2000-1650 m, 26. and 30.IV.1988 (Martens & Schawaller) (SMNS) 2; Omje Kharka NW Yamputhin, 2300-2500 m, 1-6.V.1988 (Martens & Schawaller) (SMNS) 4.

D i a g n o s i s . Body moderately large, with characteristic colour pattern. Basal elytral stria absent. Metasternum with row of punctures parallel to metacoxa. Abdominal microsculpture consisting of striae. Basal bulb of aedeagus extended dorso-apically, overlapping apical portion of median lobe. Internal sac complex, with paired apical lobes and teeth.

D e s c r i p t i o n . Length 1.70 - 2.05 mm, width 1.10 - 1.40 mm. Head and pronotum reddish-brown, medio-basal portion of pronotum more or less darkened, dark area often extended laterally and apically, rarely entire pronotum black. Elytra ochreous with black or blackish brown base, dark basal area extended apically along suture toward apical third, becomming gradually narrower and less dark (Fig. 30). Hypomeron reddish-brown or ochreous. Thorax ventrally and 1st to 3rd abdominal ventrites dark, often blackish-brown or black, following ventrites pale, ochreous or yellowish. Legs and antennae yellowish. Relative length of antennomeres as follows: III 7, IV 18, V 29, VI 23, VII 28, VIII 22, IX 26, X 25, X 30 (holotype); segments IV to VI eachelongate,IV and VI each about 5x as long as wide, V more than 6x as long as wide; VII and XI each about 3x as long as wide, VIII about 4x as long as wide. Pronotum with evenly arcuate lateral margins; lateral keels not visible in dorsal view or distinct only near base; punctation conspicuously coarse and dense near base, visible at 12x magnification, with punctures larger than intervals, those on centre and on apical portion distinctly finer and somewhat less dense. Tip of scutellum exposed. Elytron with lateral margin rounded basally, almost oblique between basal third and apex; entire lateral keel usually visible in dorsal view; apical margin truncate; inner apical angle exceeding level of outer angle; sutural margin not raised; sutural area flat or somewhat vaulted in apical half, with a row of rather coarse punctures; sutural stria gradually, weakly converging apically, hardly curved near base, not extended laterad of pronotal lobe; punctation dense and coarse; punctures near base not or only somewhat larger than those on pronotal base, elsewhere notably larger but not well delimited, distinctly larger than intervals. Pygidium extremely finely punctate. Mesepimeral ridge about 2x as long as interval between its end and mesocoxa. Metasternum not microsculptured, median portion vaulted, with two shallow apical impressions, rather finely and densely punctate. Lateral portion of metasternum very finely and sparsely punctate except for dense row of fairly coarse punctures parallel to metacoxa and for several punctures situated close to it. Mesocoxal area 0.04 - 0.06 mm long, its margin arcuate, coarsely punctate. Metepisternum moderately narrowed anteriad, at same level as metasternum or somewhat impressed, suture straight except for rounded angles. Abdomen with microsculpture of transverse striae. First ventrite fairly coarsely punctate on median portion, very finely punctate laterally. Metacoxal area 0.10 - 0.11 mm long, with arcuate, coarsely punctate margin. Tibia straight. Segment 1 of male protarsus strongly widened but narrower than tibia, following 2 segments moderately widened;

segments 1 and 2 of male mesotarsus moderately widened. Lobe of 6st ventrite conspicuously wide and short, truncate. Aedeagus (Figs 163 to 165) 0.96 - 1.12 mm long.Dorsal membranous wall of basal bulb notably extended apically, and overlapping most of ventro-apical portion of median lobe. Median lobe symmetrical, long, tapering in dorsal view, obliquely inclined, with irregular dorsal margin in lateral view. Internal sac bearing paired apical lobes with strongly sclerotized apices, two slender apical teeth, finely denticulate membranes forming complex structures, and more or less strongly sclerotized central structures. Parameres rather narrow, relatively weakly sclerotized, folded.

R e m a r k s . This species is obviously closely related with *S. immodicum* with which it shares a similar aedeagus. It may be readily distinguished from the latter by the much narrower apical portion of the median lobe. Both species differ drastically in their colour pattern.

Caryoscapha Ganglbauer

Caryoscapha Ganglbauer, 1899 (sg), type species: *Scaphisoma limbatum* Erichson, 1845, by original designation.

Members of this genus resemble *Scaphisoma* but exhibit modified apical segment of the maxillary palpus (Löbl 1987a). Four species are assigned to *Caryoscapha*: *C. limbatum* (Erichson) disjunctly distributed in Europe and in temperate East Asia, *C. seorsum* Löbl occuring in Japan, the Nearctic *C. americanum* Löbl, and the Himalayan *C. monticola* Löbl.

Caryoscapha monticola Löbl

M a t e r i a l e x a m i n e d , 1 specimen: Nepal, Manang distr., forest W Bagarchhap, 2200 m, 21.IX.1983 (Löbl & Smetana) (MHNG).

D i s t r i b u t i o n . India: Darjeeling district, Western Nepal.

Baeotoxidium Löbl

Baeotoxidium Löbl 1971; type species: *Baeotoxidium lanka* Löbl 1971, by original designation.

Baeotoxidium resembles *Scaphobaeocera* in most characters, including the narrow maxillary galea (Fig. 182) but has elytra without parasutural stria and lacks microsculpture on pronotum, elytra and metasternum. It has a conspicuously thin apical segment of labial palpus (Fig.191).

The genus seems to be restricted to the Oriental realm. It includes 7 species, 2 of which occur in the Nepal Himalaya.

Key to the Species of *Baeotoxidium*

1 Elytron with basal stria uninterrupted, joined to lateral stria ..... *siamense* Löbl
– Basal stria of elytron absent 2
2 Hypomeron angulate, with longitudinal stria. Antennomere VIII short ..... *bengalense* Löbl

– Hypomeral stria absent. Antennomere VIII elongate 3
3 Mesoxocal area margined by row of elongate pits extended laterad of mesocoxa ..... *indicum* Löbl
– Pits margining mesocoxal area not elongate and not extended laterad 4
4 Elytral disc distinctly bicolored ..... *elegans* Löbl
– Elytral disc unicolored 5
5 Mesepimeral ridge indistinct, indicated by extremely fine stria ..... *yeti* sp. n.
– Mesepimeral ridge distinct 6
6 Body blackish. Elytral punctation even, very fine ..... *gagatum* Löbl
– Body more or less dark reddish-brown. Elytral punctatation uneven, lateral portions more coarsely punctate ..... *lanka* Löbl

New records

Baeotoxidium bengalense Löbl

Material examined, 74 specimens. Nepal, Parbat distr., Ghoropani Pass, N slope, 2700-2750 m, 5-6.X.1983 (Löbl & Smetana) (MHNG) 5; Kathmandu distr., Shewapuri, 2700 m, 24.III.1983 (Rougemont) (MHNG) 1; Gokarna forest, 1400 m, 10.IX.1983 (Löbl & Smetana) (MHNG) 1; Patan distr., Phulcoki near summit, 2900 m, 4.X.1971 (Franz) (Coll. H. Franz) 3; Phulcoki, 2500-2700 m, IV, V and X. 1981, 1983 and 1984 (Löbl & Smetana) (MHNG) 48; Sindhupalcok distr., Pokhare NE Barahbise, 2800 m, 2-5.V.1981 (Löbl & Smetana) (MHNG) 2; Sankhua Sabha distr., above Sheduwa, 3000 m, 2.IV.1982 (A. & Z. Smetana) (MHNG) 1; Bakan W Tashigaon, 3250 m, 4.IV.1982 (A. & Z. Smetana) (MHNG) 1; Arun Valley, Chichila, 2200 m, 24.IV.1982 (Löbl & Smetana) (MHNG) 1; forest NE Kuwapani, 2350 m, 5.IV.1984 (Löbl & Smetana) (MHNG) 1; bottom Arun Valley below Num, 1050 m, 20-22.IV.1984 (Löbl & Smetana) (MHNG) 4; forest S Mangsingma, 2200 m, 11.IV.1984 (Löbl & Smetana) (MHNG) 1; Induwa Khola Valley, 2000 m, 16.IV.1984 (Löbl & Smetana) 1; Taplejung distr., Khabeli Khola, Yamputhin, 1650-1800 m, 3-4.VIII.1983 (Martens & Daams) (SMNS) 1; left bank of Khabeli Khola, 1800-2000 m, 27-29.IV.1988 (Martens & Schawaller) (SMNS, MHNG) 2; Hellok in Tamur Valley, 2000 m, 17.V.1988 (Martens & Schawaller) (SMNS) 1; upper Tamur Valley, 1800-2150 m, 19.V.1988 (Martens & Schawaller) (SMNS) 1; descent from Pass Deorali to Hellok, 2600-2000 m, 17.V.1988 (Martens & Schawaller) (SMNS) 1.

Distribution. India: Darjeeling distrinct, Nepal.

New species

Baeotoxidium yeti sp. n.

Holotype, male: Nepal, Sindhupallcok distr., Malemchi 2800 m, 14.IV.1981 (Löbl & Smetana) (MHNG).

Paratypes, 2: Nepal, Manang distr., Latha Manang W Bagarchap, 2350 m, 22.IX.1983 (Löbl & Smetana) (MHNG) 1 female; Sindhupalcok distr., Gul Bhanjyang, 2600 m, 6.IV.1981 (Löbl & Smetana) (MHNG) 1 female.

Diagnosis. Body ochreous, very finely punctate. Hypomeron not striate. Elytron without basal stria. Flagellum of internal sac with two basal hooks.

Description. Length 1.15 - 1.30 mm; width 0.69 - 0.78 mm. Body uniformly ochreous, or apical portion of elytra darkened. Femora, tibiae and antennae hardly paler

than body, tarsi and apical abdominal segments notably paler. Relative length of antennal segments as follows: III 9, IV 9, V 12, VI 10, VII 17, VIII 9, IX 15, X 16, XI 28; segments III to VI of almost same width; VI and VII about 2.5x as long as wide, VIII less than 2x as long as wide; XI 3x as long as wide. Pronotal punctation extremely fine, hardly visible at 100x magnification. Point of scutellum exposed. Hypomeron concave, lacking longitudinal stria. Elytron weakly narrowed apically; sutural stria deep, curved at base, not extended laterally; sutural margin not raised; discal punctation similar to that on pronotum. Mesepimeral ridge indistinct. Metasternum and 1st ventrite without microsculpture, both very finely punctate laterally. Mesocoxal area 0.04 mm long, with marginal pits not elongate and not extended laterally. Metepisternum flat, large, 0.08 - 0.11 mm wide, apically somewhat narrowed, with straight suture. Basal pits of 1st ventrite weakly elongate. Tibiae straight. Male protarsus with segments 1 to 3 moderately widened. Aedeagus (Fig. 166) 0.26 mm. Median lobe weakly curved. Parameres almost straight, with weakly sclerotized inner apical portion. Internal sac with long flagellum thickened basally and bearing two basal hooks, forming single complete circle when extruded.

R e m a r k s . This species may be readily recognised by the combination of the external characters (see the key).

Scaphobaeocera Csiki

Scaphobaeocera Csiki, 1909; type species: *Scaphobaeocera papuana* Csiki, 1909, by monotypy.
Nesotoxidium Scott, 1922; type species: *Nesotoxidium typicum* Scott, 1922, by monotypy.

Most *Scaphobaeocera* species may be distinguished from other scaphidiids in having the pronotum and elytra microsculptured and iridescent. However, the genus is defined by the presence of a parasutural stria on each elytron. So far 59 species have been recognised as valid, ranging in Asia from Pakistan and Sri Lanka to Japan, and southeastward to Australia and Micronesia. A few species are known to occur in the Mascarene and Seychelle Islands and in tropical Africa. Twelve species have been found in the Nepalese collections, one of which is described as new below.

Key to Himalayan species of *Scaphobaeocera* (including species from Meghalaya)

1 Elytron ochreous with two dark fasciae ..... species indet. c
– Colour pattern of elytron different 2
2 Antennomeres VII and IX conspicuously large, each 4x as long as segments ..... VI or VIII ..... *zdenae* sp.n.
– Antennomeres VII and IX shorter 3
3 Antennomere XI as long as, or shorter than X or IX ..... *spinigera* Löbl
– Antennomere XI longer than segments X or IX 4
4 Antennomere XI about as long as segments X and IX combined 5
– Antennomere XI shorter than X and IX combined 6
5 Length 1.3 - 1.5 mm. Aedeagus with flagellum widening basally .... *stephensoni* Löbl
– Length 1.2 - 1.2 mm. Aedeagus with flagellum narrowed basally ..... *dorsalis* Löbl
6 Upper portion of hypomeron delimited by longitudinal stria from lower portion 7
– Hypomeron without longitudinal stria 9
7 Meso- and metatibiae incurved ..... *tibialis* Löbl

– Tibiae straight 8
8 Aedeagus with parameres widening apically (lateral view) ..... *aberrans* Löbl
– Aedeagus with parameres narrowed apically (lateral view) ..... *querceti* Löbl
9 Punctation on lateral portion of metasternum fairly coarse, notably coarser than that on elytron ..... species indet. a
– Lateral portion of metasternum about as finely punctate as elytron 10
10 Antennal segment VIII very small, no more than half as long as segment VII 11
– Antennal segment VIII longer than half of segment VII 12
11 Pits margining mesocoxal area large, elongate, extended laterad ..... *discreta* Löbl
– Pits margining mesocoxal area small, not elongate, not extended laterad ..... species indet. b
12 Metasternum and 1st ventrite lacking microsculpture 13
– Metasternum and 1st ventrite microsculptured 14
13 Length 0.95 - 1.20 mm. Body pale, ochreous or reddish ..... *nuda* Löbl
– Length 1.45 - 1.55 mm. Body dark reddish brown ..... *fratercula* Löbl
14 Metasternum with median stria 15
– Metasternum without median stria 16
15 Aedeagus with flagellum forming 3 or 4 complete circles ..... *difficilis* Löbl
– Aedeagus with flagellum forming 6 complete circles ..... *spira* Löbl
16 Basal bulb of aedeagus extended apically beyond level of parameral base, with oblique, abruptly delimited apical wall (lateral view) ..... *nobilis* Löbl
– Aedeagus different 17
17 Median lobe of aedeagus with ventral plate protruding apically above base of parameres ..... *lamellifera* Löbl
– Median lobe of aedeagus lacking ventral plate 18
18 Ventral processi of aedeagus large, strongly protruding apically ..... *tenella* Löbl
– Ventral processi of median lobe small not protruding apically 19
19 Internal sac of aedeagus with flagellum joined to additional basal sclerite ..... *timida* Löbl
– Internal sac of aedeagus lacking additional sclerite 20
20 Flagellum of aedeagus with basal hook ..... *cognata* Löbl
– Flagellum of aedeagus lacking basal hook 21
21 Flagellum of aedeagus spiral ..... *mussardi* Löbl
– Flagellum of aedeagus sinuate, not forming complete circles ..... *minuta* (Achard)

New records

Scaphobaeocera nuda Löbl

Material examined, 5 specimens: Nepal, Kaski distr., near Pokhara lake, 20.IX.1979 (Franz) (Coll. H. Franz) 1; Patan distr., Godawari, 1600 m, 31.III.1984 (Löbl) (MHNG) 1; Dhanding distr., Thorpu to Kordung, 1300-1400 m, 24.VI.1983 (Martens & Schawaller) (SMNS, MHNG) 3.

Distribution. India, Nepal, Thailand.

Scaphobaeocera minuta (Achard)

Material examined, 4 specimens: Nepal, Sankhua Sabha, Chichila, 2200 m, 4.IV.1984 (Löbl & Smetana) (MHNG) 2; forest S Mangsingma, 2200 m, 11-13.IV.1984 (Löbl & Smetana) (MHNG) 2.

Distribution. North India, Nepal, Thailand.

Scaphobaeocera dorsalis Löbl

Material examined, 1 specimen. Nepal, Sankhua Sabha distr., bottom Arun Valley below Num, 1050 m, 21.IV.1984 (Löbl & Smetana) (MHNG).

Distribution. North India, Nepal, Thailand, Thaiwan.

Scaphobaeocera stephensoni Löbl

Material examined, 13 specimens: Nepal, Kathmandu distr., Gokarna forest, 1400 m, 1.IV.1981 (Löbl & Smetana) (MHNG) 2; Sankhua Sabha distr., forest NE Kuwapani, 2500 m, 28.III.1982 (A. & Z. Smetana) (MHNG) 2 and 2250 m, 24.IV.1984 (Löbl & Smetana) (MHNG) 1; Chichila, 2200 m, 24.IV.1984 (Löbl & Smetana) (MHNG) 1; bottom Arun Valley below Num, 1050 m, 21.IV.1984 (Löbl & Smetana) (MHNG) 2; forest S Mangsingma, 2200 m, 11.IV.1984 (Löbl & Smetana) 2; Taplejung distr., above Yamputhin, left bank of Kabeli Khola, 1800-2000 m, 27-29.IV.1988 (Martens & Schawaller) (SMNS) 1; Omje Kharka NW Yamputhin, 2300-2500 m, 1-6.V.1988 (Martens & Schawaller) (SMNS, MHNG) 2.

Distribution. North India (Himachal Pradesh), Nepal.

Scaphobaeocera spinigera Löbl

Material examined, 27 specimens: Nepal, Sindhupalcok distr., Malemchi, 2800 m, 14. and 17.IV.1981 (Löbl & Smetana) (MHNG) 9; Kathmandu distr., Gokarna forest, 1400 m, 1.IV.1981 (Löbl & Smetana) (MHNG) 1; Sankhua Sabha distr., Arun River at Num, 1500-1600 m, 10.IV.1982 (A. & Z. Smetana) (MHNG) 1; ridge S Mangsingma, 2800 m, 8.IV.1984 (Löbl & Smetana) (MHNG) 1; above Pahakhola, 2600-2800 m, 31.V.-3.VI.1988 (Martens & Schawaller) (SMNS) 1; Ilam distr., Mai Pokhari, 2100-2200 m, 9-10.IV.1988 (Martens & Schawaller) (SMNS) 1; Taplejung distr., SE Yamputhin to Yamputhin, 26. and 30.IV.1988 (Martens & Schawaller) (SMNS) 1; India, Himachal Pradesh, 4 km SW Solan, 1500 m, 8.X.1988 (Vit) (MHNG) 12.

Distribution. Pakistan, India, Nepal, Thailand.

Scaphobaeocera tenella Löbl

Material examined, 3 specimens: Nepal, Sankhua Sabha distr., bottom Arun Valley below Num, 1050 m, 21-22.IV.1984 (Löbl & Smetana) (MHNG).

Distribution. India (Meghalaya), Nepal, Thailand.

Scaphobaeocera cognata Löbl

Material examined, 8 specimens: Nepal, Kathmandu distr., Nagarjung, Jamacok, 1900-2100 m, 18.VIII.1983 (Martens & Schawaller) (MHNG) 1; Patan distr., Phulcoki, Godawari, 1700 m, 10.V.1981 (Löbl) 1; Sindhupalcok distr., Pokhare NE Barahbise, 2700 m, 7.V.1981 (Löbl & Smetana) 1; Taplejung distr., Yamputhin, 1800 m, 26.IV.-1.V.1988 (Martens & Schawaller) (SMNS) 2; above Yamputhin, left bank of Kabeli Khola, 1800-2000 m, 27-29.IV.1988 (Martens & Schawaller) (SMNS, MHNG) 3.

Distribution. North India (Garhwal and Meghalaya), Nepal.

Scaphobaeocera spira Löbl

Material examined, 1 specimen: Nepal, Sankhua Sabha distr., bottom Arun Valley below Num, 1050 m, 22.IV.1988 (Löbl & Smetana) (MHNG).

Distribution. Nepal, Thailand.

Scaphobaeocera mussardi Löbl

Material examined, 4 specimens: Nepal, Sankhua Sabha distr., forest S Mangsingma, 2200 m, 11.IV.1984 (Löbl & Smetana) (MHNG) 1; Chichila, 2200 m, 24.IV.1984 (Löbl & Smetana) (MHNG) 1; forest NE Kuwapani, 2250 m, 24.IV.1984 (Löbl & Smetana) 1; Induwa Khola Valley, 2100 m, 17.IV.1984 (Löbl & Smetana) (MHNG) 1.

Distribution. Sri Lanka, India, Nepal, Bhutan.

Scaphobaeocera difficilis Löbl

Material examined, 99 specimens: India, Himachal Pradesh, 10 km NW Solam, 1700 m, 7.X.1088 (Vit) (MHNG) 35; Baroq forest 4 km SW Solam, 1500 m, 8.X.1988 (Vit) (MHNG) 13; Kulu Valley, Naggar 1850 m, 16.X.1988 (Vit) (MHNG) 2; Dalhousie, Shubhash Baoli, 2080 m, 20.X.1988 (Vit) (MHNG) 1; Khajiar E Dalhousie, 1950 m, 21.X.1988 (Vit) (MHNG) 1; Mashabra forest NE Simla, 2100 m, 30.X.1988 (Vit)(MHNG) 1; Nepal, Parbat distr., Ghoropani Pass, 2850 m, 5.X.1983 (Löbl & Smetana) (MHNG) 1; Rasuwa distr., below Gosaikund, 2680 m, 21.X.78 (Cassagnau) (MHNG) 1; Kathmandu distr., Siwapuri Dara, 2400 m, 30.IV.1985 (Smetana) (MHNG) 1; Gokarna forest, 1400 m, 31.III.1981 (Löbl & Smetana) (MHNG) 1; Patan distr., Godawari, Phulcoki, 2000 m, 21.IV.1988 (Brachat) (MHNG) 2; Phulcoki, 2500-2700 m, IV. and V.1981 and 1984, X.1983 (Löbl & Smetana) (MHNG) 13; Sindhupalcok distr., Chaubas, 2600 m, 5.IV.1981 (Löbl & Smetana) (MHNG) 1; Gul Bhanjyang, 2600 m, 6.IV.1981 (Löbl & Smetana) (MHNG) 1; Tarke Ghyang, 2650 m, 19.IV.1981 (Löbl & Smetana) (MHNG) 2; Malemchi, 2800 m, 14. and 17. IV. 1981 (Löbl & Smetana) (MHNG) 4; Pokhare NE Barahbise, 2700 m, 2.V.1981 (Löbl & Smetana) (MHNG) 1; Sankhua Sabha distr., Arun Valley, betw. Mure and Hurure, 2550-2150 m, 3-17.VI.1988 (Martens & Schawaller) (SHNS) 1; Chichila, 2200 m, 4.IV.1988 (Löbl & Smetana) (MHNG) 2; Chitre, 2200-2400 m, 28-29.V.1985 (Holzschuh) (NMB) 1; forest NE Kuwapani, 2450 m, 13.IV.1982 (A. & Z. Smetana) (MHNG) 4; forest S Mangsingma, 2250 m, 12.IV.1984 (Löbl & Smetana) (MHNG) 1; Induwa Khola Valley, 2000 m, 16-17.IV.1984 (Löbl & Smetana) (MHNG) 5; Panchtar distr., Paniporua, 2300 m, 18-20.IV.1988 (Martens & Schawaller) (SMNS) 1; Taplejung distr., Lassetham NW Yamputhin, 3300-3500 m, 6-9.V.1988 (Martens & Schawaller) (SMNS) 1; Ilam distr., Cilang Khola Valley, 11-13.IV.1988 (Martens & Schawaller) (SMNS) 1; Mai Pokhari, 2100-2200 m, 9-10.IV.1988 (Martens & Schawaller) (SMNS) 3.

Distribution. Pakistan, India, Nepal, Thailand.

Scaphobaeocera timida Löbl

Material examined, 115 specimens: Nepal, Jumla distr., Dzunda Khola Valley near Talphi, 3000-3500 m, (Franz) (Coll. Franz) 1; Manang distr., forest W Bagarchap, 2200-2500 m, 22. and 24.IX.1983 (Löbl & Smetana) (MHNG) 22; Latha Manang W Bagarchap, 2350 m, 22.IX.1983 (Löbl & Smetana) (MHNG) 7; Mustang distr., 2 km N Kalopani, 2550 m, 1.X.1983 (Löbl &

Smetana) (MHNG) 1; Parbat distr., Ghoropani Pass, 2700-2850 m, 5-6.X.1983 (Löbl & Smetana) (MHNG) 35; Ridge E Ghoropani Pass, 3100 m, 7.X.1983 (Löbl & Smetana) (MHNG) 1; Ghoropani Pass, 3000 m, 19.IX.1971 (Franz) (Coll. H. Franz) 1; Mustang distr., Tukuche, valley to Taksang, ca 3000 m, 23.IX.1971 (Franz) (Coll. Franz) 1; above Shika, Khali Gantaki Valley, 26.IX.1971 (Franz) (Coll. H. Franz) 1; Kaski distr., above Dhumpus, 2100 m, 8-10.V.1980 (Martens & Ausonsky) (SMNS) 1; Kathmandu distr., Gokarna forest, 1400 m, 3.X.1971 (Franz) (Coll. H. Franz) 1; Patan distr., godawari, Phulcoki, 1700 m, 10.V.1981 (Löbl) (MHNG) 1; Phulcoki, 2300-2700 m, V.1981, X.1983, IV.1984 (Löbl & Smetana) (MHNG) 7; Phulcoki, 2600 m, 9.VIII.1970 (Franz) (Coll. H. Franz) 2; Sindhupalcok distr., Chaubas, 2600 m, 5.IV.1981 (Löbl & Smetana) (MHNG) 2; Gul Bhanjyang, 2600 m, 6.IV.1981 (Löbl & Smetana) (MHNG) 2; Malemchi, 2800 m, 14.IV.1981 (Löbl & Smetana) (MHNG) 1; Shermathang, X.1980 (Franz) (Coll. H. Franz, MHNG) 6; Durum Valley near Barahbise, 2200-2300 m, 5.VIII.1970 (Franz) (Coll. H. Franz, MHNG) 2; above Barahbise, 2200-2300 m, 5.VIII.1970 (Franz) (Coll. H. Franz) 1; Sankhua Sabha distr., Chichila, 2200 m, 24.IV.1984 (Löbl & Smetana) (MHNG) 2; forest S Mangsingma, 2200 m, 11.IV.1984 (Löbl & Smetana) (MHNG) 1; above Pahakhola, 2600-2800 m, 31.V.-3.VI.1988 (Martens & Schawaller) (SMNS) 1; Arun Valley, betw. Mure and Hurure, 2050-2150 m, 17.VI.1988 (Martens & Schawaller) (SMNS) 1.

Distribution. North India (Himachal Pradesh and Kumaon), Nepal, Bhutan.

Scaphobaeocera species indet. c

Material examined, 4 females: Nepal, Sankhua Sabha distr., Jaljale Himal, 2530 m, 21.XI.1978 (Casagnau) (MHNG) 1; Therhathum distr., Tinjura Dara, 2450-2850 m, 17.IX.1983 (Martens & Daams) (SMNS) 1; Dankuta distr., Dankuta, 18.IX.1978 (Bhakta) (NMB) 1; Cheavri Bas, 18.IX.1978 (Bhakta) (MHNG) 1.

Remarks. This is possibly a new species. It resembles much *S. alticola*, especially in the colour pattern and in having elytron with somewhat shortened sutural striae. It may be distinguished by the relatively much shorter metasternum (with smallest interval between meso- and metacoxa not exceeding 0.10 mm). However, I am reluctant to name it in the absence of males.

New species

Scaphobaeocera zdenae sp.n.

Holotype, female: Nepal, Sankhua Sabha distr., forest NE Kuwapani, 2500 m, 28.III.1982 (A. & Z. Smetana) (MHNG).

Diagnosis. Medium-sized species. Antennomeres VII and IX very large, each 4x as long as segment VIII and 6x as long as wide. Hypomeron lacking longitudinal stria. Metasternum without median impression or stria.

Description. Length 1.65 mm, width 1.07 mm, dorso-ventral diameter 1.09 mm. Body, antennae and legs almost uniformly dark brown. Pronotum, elytra, and abdominal ventrites microsculptured and iridescent. Punctation extremely fine on both, dorsal and ventral sides of body, setiferous punctures around smooth metasternal centre excepted. Relative length of antennomeres as follows: III 8, IV 14, V 16, VI 10, VII 40, VIII 10, IX 40 (segments X and XI missing in both antennae). Segments III to VI each gradually widening apically; III about 1.6x as long as wide; IV and V each 3x as long as wide; VI about 1.8x as long as wide; VII and IX each 6x as long as wide, parallel-sided; VIII about 2x as long as wide. Hypomeron with larger lower portion almost vertical, at an

angle with upper portion; longitudinal stria absent. Metasternum without median impression or stria, distinctly microsculptured laterally. Mesocoxal area 0.03 mm long, with fine marginal pits. Metepisternum flat, parallel-sided, 0.10 mm wide, with straight suture. Basal punctures of 1st ventrite small, not elongate. Tibiae I and II straight, III somewhat curved.

R e m a r k s . This species may be easily distinguished from all other members of the genus by the conspicuously large antennal segments VII and IX, each being 4x as long as segments VI or VIII.

Scaphoxium Löbl

Scaphoxium Löbl, 1979; type species: *Toxidium madurense* Pic, 1920, by original designation.

Scaphoxium may be readily separated from other scaphidiids possessing strongly approximate meso- and metacoxae by the peculiar shape of the basally lobed or extended hypomeron. It may also be distinguished by the curved elongate antennomere III. All *Scaphoxium* have bodies strongly convex dorsally and ventrally, elytra finely punctate with shortened sutural striae and parameres of aedeagus abruptly narrowed subapically.

The genus includes 25 species ranging from India and Sri Lanka to Japan, Australia and Melanesia. Several additional Asian and Afrotropical unidentified species are represented in the collection of the MHNG.

Key to the Asian species of *Scaphoxium*

1 Elytron dark, with two pale transverse fasciae 2
– Elytron uniformly coloured 3
2 Length 1.6 - 1.9 mm. Metasternum not impressed at middle ..... *zebra* (Löbl)
– Length 1.25 - 1.40 mm. Metasternum impressed at middle ..... *oblitum* (Löbl)
3 Large species 2.15 mm long ..... *grande* Löbl
– Smaller species, length not exceeding 1.9 mm 4
4 Lateral portion of metasternum with relatively coarse punctures ..... *gibbosum* (Champion)
Lateral portion of metasternum very finely punctate 5
5 Internal sac of aedeagus membranous ..... *singlanum* Löbl
– Internal sac of aedeagus bearing sclerites 6
6 Metasternum flat or convex at middle 7
– Metasternum impressed at middle 13
7 Each paramere of aedeagus with large subapical lobe 8
– Parameres of aedeagus different 10
8 Antennomere III as long as IV, segment V as long as VI. Internal sac of aedeagus bearing 5 short sclerites ..... *avidum* Löbl
– Antennomere III longer than IV, segment V longer than VI. Internal sac of aedeagus with a pair of long sclerites 9
9 Parameres of aedeagus gradually tapering beyond subapical lobe. Sclerites of internal sac uncular ..... *taiwanum* Löbl
– Parameres of aedeagus abruptly narrowed beyong subapical lobe. Sclerites of internal sac not uncular ..... *topali* Löbl
10 Internal sac with apical portion of sclerites uncular ..... *madurense* (Pic)

– Scerites of internal sac not uncular 11
11 Parameres of aedeagus each bearing minute subapical denticle-like apophysis ..... *japonicum* Löbl
– Parameres of aedeagus different 12
12 Length 1.5 mm. Antennomere V longer than III ..... *taylori* Löbl
– Length 1.2 mm. Antennomere V as long as III ..... *assamense* Löbl
13 Mesosternum with median keel partly dividing median impression ..... *sparsum* Löbl
– Mesosternum lacking median keel 14
14 Parameres of aedeagus with wide, rounded subapical lobe ..... *keralense* Löbl
– Parameres of aedeagus with narrow, pointed subapical lobe 15
15 Parameres of aedeagus widened or subparallel beyong level of subapical apophysis, narrowed near apex ..... *eximium* Löbl
– Parameres of aedeagus tapering from level of subapical apophysis 16
16 Subapical lobe of parameres minute ..... *reductum* Löbl
– Subapical lobe of parameres long, longer than width of paramere at same level 17
17 Antennomere III as long as IV. Internal sac of aedeagus without a pair of elongate basal sclerites ..... *simulans* (Löbl)
– Antennomere III longer than IV. Internal sac of aedeagus with a pair of long basal sclerites ..... *intermedium* Löbl

New records

Scaphoxium eximium Löbl

Material examined, 4 specimens: India, Himachal Pradesh, 10 km NW Sarahan, 1700 m, 7.X.1988 (Vit) (MHNG).

Distribution. North India: Himachal Pradesh, Kumaon.

Remarks. The armature of the not extruded internal sac of the aedeagus is as in Fig. 167.

Scaphoxium taiwanum Löbl

Material examined, 1 specimen: Nepal, Sankhua Sabha distr., Induwa Khola Valley, 2000 m, 18.IV.1984 (Löbl & Smetana) (MHNG).

Distribution. India, Nepal, Thailand, Taiwan.

Scaphoxium sparsum Löbl

Material examined, 25 specimens: Kaski distr., Tandarakot, trail Pokhara to Ghoropani, ca 1000 m, 18.IX.1971 (Franz) (Coll. H. Franz, MHNG) 6; hill near Pinta, Kaste Lake, 20.IX.1978 (Franz) (Coll. H. Franz) 2; Kathmandu distr., Rani Ban SE Sanogau, 1500-1600 m, 25.IV.1988 (Brachat) (MHNG) 1; Patan distr., Godawari, 1600 m, 31.III.1984 (Löbl) (MHNG) 1; Phulcoki near Dalikhel, ca 1900 m, 21.IX.1977 (Franz) (Coll. H. Franz, MHNG) 2; Sankhua Sabha distr., bottom Arun Valley below Num, 1050-1100 m, 20-21.IV.1984 (Löbl & Smetana) (MHNG) 9; Arun River at Num, 1500-1600 m, 10.IV.1982 (A. & Z. Smetana) (MHNG) 2; Khandbari, 1700 m, 23.III.1982 (A. & Z. Smetana) (MHNG) 1; Induwa Khola Valley, 2000 m, 18.IV.1984 (Löbl & Smetana) (MHNG) 1.

Distribution. India, Nepal, Thailand.

Scaphicoma Motschulsky

Scaphicoma Motschulsky, 1863; type species: *Scaphicoma flavovittata* Motschulsky, 1863, by monotypy.
Lepteroscapha Achard, 1921; type species not designated.

Members of this genus differ by conspicuously long tarsi and antennae in comparision with all other scaphidiids with similarly strongly approximate meso- and metacoxae. The mouthparts in *Scaphicoma* (Figs 177, 187, 188) are very similar to those in *Toxidium*.

The genus occurs in tropical Africa and in Asia. Twelwe species habe been recognised, one of which is encountered in the Himalayan region.

New record

Scaphicoma arcuatum (Champion)

Material examined, 4 specimens: Nepal, Sankhua Sabha distr., bottom Arun Valley below Num, 1050 m, 22.IV.1984 (Löbl & Smetana) (MHNG) 3; Taplejung distr., Yamputhin, 1800 m, 26.IV. - 1.V.1988 (Martens & Schawaller) (SMNS) 1.

Distribution. India: Kumaon, Darjeeling district and Assam, Nepal, Burma, Thailand.

Remarks. It is difficult to distinguish the members of this genus by their aedeagal characters. However, minor distinguishing characters may be found in the shape of the parameres and in the structure of the internal sac. The aedeagus of *S. arcuatum* is as in Fig. 173.

Toxidium LeConte

Toxidium LeConte, 1860; type species: *Toxidium gammaroides* LeConte, 1860, by monotypy.

Most of the strongly ventrally vaulted scaphidiids with approximate meso- and metacoxae and with large lateral portions of metasternum were previously assigned to *Toxidium*. When revising collections, I have transferred many of these species to *Scaphobaeocera*, *Baeotoxidium*, *Scaphoxium* and Scaphicoma. In the Asian and Australian faunas, only two species groups remain to date in *Toxidium*: the *aberrans*, and the *montanum* groups. The latter, for which a new genus is erected below, consists of three described and one new species.

The species of the *aberrans* group share most of the diagnostic characters with *T. gammaroides* and its New World allies: labrum with marginal row of short thick setae; mandible bidentate apically, with comb-hairs, very fine prosthecal hairs and bunch of premolar hairs (Fig.178); maxillary lacinia slender, setose apically; penultimate segment of maxillary palpus subcylindrical, apical segment tapering, at base almost as thick as preceding segment at apex (Fig. 185); labial palpus (Fig. 190) with segment II about as long as wide, and as wide as I, segment III curved, gradually narrowed apically; eye notched at or above level of its mid-length, antennal insertion fairly distant from clypeal

suture; antennomere III slender, straight, similar to the following segments; pronotum with basal angles obtuse and not extended, not reaching level of anapleural suture; pair of internal pronotal cavities (or pockets) absent; hypomeron weakly inflexed, not explanate apically; elytral parasutural stria absent, sutural stria usually shortened; prosternal keel sharply raised; mesosternal median keel obsolete or very low, pleural ridge of first ventrite distinct.

All species except *T. vagans* differ from the New World species of *Toxidium* by the relatively less approximate meso- and metacoxae. All Asian species, including several undescribed species represented in the collection of MHNG, may be also distinguished from the New World members of *Toxidium* by the ventrally less vaulted body. In addition, these species, *T. incompletum* and an unidentified species from Thailand excepted, share the unusual character combination of elytron, i. e. shortened sutural and distinct basal striae. In *Toxidium*, the mesepimeral ridge is usually absent, but it is present in *T. indicum*.

The rare monotypic *Scaphischema* from the western Mediterranean area shares almost all the diagnostic characters of *Toxidium*. It is particularly similar to the species of *T. aberrans* group.

Key to the Asian species of *Toxidium* (only named species)

1 Most of elytron bright reddish, surface along sutural stria and apical fifth of elytron blackish ..... *spectabile* sp. n.
– Elytron and pronotum unicolorous, or elytron with small pale transverse fascia 2
2 Metasternum short, mesocoxal area about as long as shortest interval between its margin and metacoxa ..... *vagans* Löbl
– Metasternum long, mesocoxal area much shorter than shortest interval between its margin and metaxoca 3
3 Elytron with basal stria 4
– Basal stria of elytron absent ..... *incompletum* Löbl
4 Lateral portion of metasternum with fairly coarse punctures. Mesepimeral ridge distinct ..... *indicum* Achard
– Entire metasternum very finely punctate. Mesepimeral ridge absent 5
5 Pronotal punctation coarse, distinct at magnification 12x ..... *aberrans* Achard
– Pronotal punctation very fine, hardly visible at magnification 25x 6
6 Elytron with fairly long sutural stria starting beyond basal 1/8 of sutural length 7
– Elytron with very short sutural stria, visible only near elytral apex 8
7 Elytral punctation entirely coarse ..... *curtilineatum* Champion
– Elytron finely punctate apically ..... *styligerum* Löbl
8 Elytron with basal stria obsolete laterally; elytral punctation almost obsolete basally ..... *pubistylis* Löbl
– Elytron with basal stria joined to lateral stria; elytral punctation distinct at base 9
9 Mesocoxal area about as long as half of interval between its margin and margin of metacoxa ..... *diffidens* Löbl
– Mesocoxal area distinctly shorter than half of interval between its margin and metacoxa ..... *robustum* Pic

New records

Toxidium curtilineatum Champion

Material examined, 7 specimens: Nepal, Lamjung distr., Marsyandi, 1100-1250 m, Senghe-Jagat, 11.IV.1980 (Martens & Schawaller) (SMNS) 1; Kathmandu distr., Gokarna forest,

31.III - 1.IV. 1981 and 20.X.1983 (Löbl & Smetana) (MHNG) 4; Sankhua Sabha distr., Mure-Num, 1900-1500 m, 25.V.1980 (Wittmer) (NMB) 1; Chichila-Mure, 1900 m, 24.V.1980 (Wittmer) (MHNG) 1.

Distribution. North India (Garhwal, Kumaon and Meghalaya), Nepal.

Remarks. Some of the Nepalese specimens have a narrow pale transverse fascia on apical half of elytron. The aedeagi of these specimens (Figs 168, 189) are not different from those of the uniformly coloured specimens. No additional distinguishing feature has been found to separate both forms.

New species

Toxidium spectabile sp. n.

Holotype, female: Nepal, Taplejung distr., above Yamputhin, left bank of Kabeli Khola, open forest, 1800-2000 m, 27-29.IV.1988 (Martens & Schawaller) (MHNG).

Diagnosis. Elytron with distinct colour pattern, basal stria present in centre of basal margin only, sutural stria obsolete except in apical tenth of sutural length. Metasternum long.

Description. Length 2.7 mm, width 1.6 mm. Head black. Pronotum reddish-brown, distinctly darkened at apical margin, somewhat darkened in middle. Elytron bright reddish,reddish-brown near base, blackish along sutural stria and on entire apical fifth. Mesepisternum, metepisternum and lateral portion of metasternum blackish, prosternum, mesosternum and centre of metasternum, ventrites I to IV and legs reddish-brown, apical abdominal segments and antennae ochreous or yellowish. Relative length of antennomeres as follows: III 25, IV 32, V 38, VI 33, VII 34, VIII 25, IX 33, X 33, XI 38; segment VII almost 3.5x as long as wide; VIII and XI each about 3x as long as wide. Pronotal punctation sparse and very fine, visible at magnification 25x. Exposed portion of scutellum fairly large. Elytron with basal stria visible along middle portion of basal margin, obsolete near pronotal lobe and near lateral margin; sutural stria strongly reduced, distinct in apical tenth of sutural length; discal punctation irregular, much coarser than that of pronotum, most punctures smaller than intervals, punctures near sutural stria arranged in 1 or 2 dense rows. Pygidium extremely finely punctate. Entire ventral side of thorax very finely and sparsely punctate. Metasternal centre flat, lacking impression. Mesocoxal area 0.12 mm long, about as long as half of shortest interval between its margin and metacoxa; marginal pits rather coarse. Metepisternum flat, with straight, deep, punctate suture. Abdominal microsculpture consisting of punctures. Tibia I and III straight, II somewhat curved.

Remarks. This species may be readily recognised by its colour pattern. The only other Asian *Toxidium* which has a well delimited reddish pattern on elytron known to me is an undescribed species from Malaysia. However, it differs conspicuously by much smaller size of the body and by the colour pattern forming a semicircular band.

Xotidium gen. n.

Type species: *Xotidium uniforme* sp.n.
Gender: neuter.
Etymology: anagram of *Toxidium*.

Diagnosis. In general shape similar to *Toxidium*. Antennal insertion distant from clypeal suture. Mandible multidentate apically. Basal pronotal angles not extended: Elytron with entire basal stria. Metacoxae approximate. Median lobe of aedeagus subcylindrical.

D e s c r i p t i o n . Body narrow, similar to that of *Toxidium*. Pronotum and elytron not iridescent. Head hypognathous. Eye weakly notched. Antennal insertion about as distant from clypeal suture as from posterior margin of eye. Antenna long, segment III slender, straight, similar to following segments. Mandible multidentate apically, with two comb-hairs, simple prostheca, robust premolar hairs (Fig. 179). Maxillary lacinia very slender, with few lateral hairs, apical hairs absent; galea with marginal rows of robust spine-like hairs (Fig. 186). Segment III of maxillary palpus not thickened, segment IV at base almost as thick as III. Labial palpus 2-segmented, with basal segment subcylindrical, apical segment very slender (Fig. 189). Prothorax with internal setose cavities. Basal angles of pronotum obtuse, not prolongated, not reaching level of anapleural suture. Hypomeron inflexed, not explanate basally. Elytron with entire basal stria joined with lateral and sutural striae; parasutural stria absent. Prosternal keel raised, triangular in lateral view. Mesosternal intercoxal process covering anterior margin of metasternal process. Median mesosternal keel absent. Mesepimeral ridge obsolete. Meso- and metacoxae strongly approximate, median portion of metasternum narrow. First ventrite without pleural stria or ridge. Legs long, meso- and metatibiae with single long apical spur, meso- and metatarsi almost as long as tibiae. Aedeagus with subcylindrical median lobe lacking well delimited apical portion, widened at tip. Parameres with slender basal and wider apical portion.

R e m a r k s . The morphological features of this group of species puzzled me for many years. The discovery of an additional Himalayan species made me to reexamine their diagnostic characters. As a result, a new genus is erected. In addition to the type species, the new genus includes *Toxidium montanum* Löbl and *T. pygmaeum* Löbl from Sri Lanka, and *T. notatum* Löbl from Australia (new combinations).

To date, I have revised only some of the Afrotropical taxa assigned originally to *Toxidium*: all belong to *Scaphobaeocera*, *Scaphoxium* or to an undescribed genus. Hence, the occurrence of *Toxidium* in Africa has yet to be confirmed.

Xotidium may be readily separated from *Toxidium* and from most species assigned to genera with both, approximate coxae and reduced pubescent of body, by the entire elytral basal stria. Besides *Baeotoxidium siamense*, only *Scaphischema* and most of the members of the *Toxidium aberrans* group exhibit basal stria of elytron, which is usually not joined to the shortened sutural stria (except for that in one undescribed species housed in MHNG). It is probable that this condition is likely apomorphic, while the obtuse, unextended basal angles of the pronotum (shared with *Scaphicoma*, *Toxidium* and *Scaphoxium*) is obviously a plesiomorphic character state. However, both provide useful dichotomous characters. A synapomorphy of *Xotidium*, *Toxidium* and *Scaphicoma* is the position of the antennal insertion; the long tarsi are shared with *Scaphicoma*, but the shallow eye notch and the presence of the internal prothoracal cavities distinguish the new genus from the others. The mouthparts of *Xotidium* are unique: the mandible has several apical teeth and bears a premolar group of robust hairs, in combination with the presence of comb-hairs, the maxillary lacinia lacks apical hairs, and the labial palpus is two-segmented, with subcylindrical basal segment and conspicuously thin apical segment.

Scaphoxium may be easily separated from *Xotidium* by the curved 3rd antennal segment, the basally explanate hypomeron, and by the thickened penultimate segment of the maxillary palpus which is much wider at apex than the base of the apical segment. The latter state is found also in *Scaphobaeocera* and *Baeotoxidium* (Figs 182, 183). *Scaphobaeocera* has the elytron almost always microsculptured and iridescent, and exhibits a parasutural stria. Like *Baeotoxidium*, it also differs from *Xotidium* by the long,

distinct mesepimeral ridge and by the sutural stria of the elytron not extended along the elytral base. An autapomorphy of *Baeotoxidium* is the very slender maxillary galea (Fig. 182).

Key to the species of *Xotidium*

1 Body uniformly brown or reddish-brown 2
– Body with distinct colour pattern 3
2 Length 1.10 - 1.25mm. Aedeagus with sinuate, evenly wide flagellum ..... *pygmaeum* (Löbl)
– Length 1.55 - 1.65mm. Aedeagus with U-shaped, basally thickened flagellum..... *uniforme* sp. n.
3 Elytron dark with pale transverse fascia in basal half and with pale apical portion. Pronotum uniformly dark ..... *montanum* (Löbl)
– Elytron pale, darkened along basal and apical margins, and usually also along sutural margin. Pronotum pale, usually with dark transverse fascia ..... *notatum* (Löbl)

Xotidium uniforme sp. n.

Holotype, male: Nepal, Sankhua Sabha distr., Induwa Khola Valley, 2100 m, 17.IV.1984 (Löbl & Smetana) (MHNG).

Paratypes, 16: Nepal, Sankhua Sabha distr., Arun Valley, Chichila, 1900-2000 m, bushes near village, 18-20.VI.1988 (Martens & Schawaller) (SMNS, MHNG) 4 males, 5 females; Taplejung distr., SE Yamputhin to Yamputhin, 2000-1650 m, forest mainly Alnus, 26. and 30.IV.1988 (Martens & Schawaller) (SMNS) 1 female; ?Dolakha distr., Jiri - Thorung, 28.V.1976 (Wittmer & Baroni Urbani) (NMB) 1 male; Patan distr., Phulcoki (Franz) (Coll. H. Franz) 1 female; Godawari, 6000 ft. 7-13.VIII.1967 (Canadian Nepal Exp.) (CNC) 1 male; India, Uttar Pradesh, Kumaon, Rangarh, ca 2000 m, 9.X.1979 (Löbl) (MHNG) 1 female; Himachal Pradesh, 10 km NW Sarahan, 1700 m, 7.X.1988 (Vit) (MHNG) 2 males.

D i a g n o s i s . Body relatively large, uniformy brown or dark reddish-brown. Abdomen with microsculpture consisting of punctures. Flagellum of aedeagus U-shaped, thickened at base.

D e s c r i p t i o n . Length 1.55 - 1.65 mm, width 0.92 - 1.07 mm. Body uniformly brown or dark reddish-brown. Apical abdominal segments, legs and antennae paler. Relative length of antennomeres as follows: II 23, III 16, IV 19, V 21, VI 21, VII 25, VIII 22, IX 27, X 25, XI 28 (holotype). Punctation very fine, that of pronotum, elytron and ventral side of thorax hardly visible at 50x magnification. Sutural area flat. Metasternum lacking median impression. Mesocoxal area 0.05-0.07 mm long, with distinct marginal pits. Metepisternum evenly wide, with straight or somewhat sinuate suture. Abdominal microsculpture consisting of extremely fine punctures. Male protarsus hardly widened. Aedeagus (Figs 170 to 172) 0.67 - 0.80 mm long. Widened apical portion of parameres long. Flagellum of internal sac U-shaped, very thin, thickened basally.

R e m a r k s . This species may be readily distinguished by the characters used in the key.

Bironium Csiki

Bironium Csiki 1909; type species: *Bironium longipes* Csiki, 1909, by monotypy (*longipes* Csiki is secondary junior homonym of *longipes* Reitter, 1880; it is replaced by the juniow subjective synonym *Heteroscapha basicolle* Pic, 1956).
Heteroscapha Achard, 1914; type species: *Heteroscapha feai* Achard, 1914, by monotypy.
Scutotoxidium Pic, 1915; type species: *Scutotoxidium nigrolineatum* Pic, 1915.
Arachnoscaphula Heller, 1917; type species: *Arachnoscaphula trisulcata* Heller, 1917.

This genus is well characterized by the combination of the following characters: antennae, femora and tibiae conspicuously long; antennal insertion situated near upper eye margin; hypomeron vertical; basal pronotal angle rounded, at level of centre of mesepisternum; meso- and metacoxae distant.

Most of the 25 recognised species exhibit conspicuous elytral and metasternal punctation, and all of them have elytron with entire basal stria.

The range of the genus covers south east Asia and New Guinea. The sole record for the Himalayan region is that of a female specimen of *Heteroscapha distinctum* Achard (CHAMPION 1927: 272) from "Gopalhara, Darjeeling". *Bironium distinctum* is known from Burma and Thailand, and may occur in India. It belongs to a group of which members may be reliably identified only by the male sexual characters. Thus, Champion's record has to be confirmed. An additional, undescribed species has been found in Eastern Nepal.

Bironium nepalense sp. n.

Holotype, male: Nepal, Sankhua Sabha distr., Arun Valley, Chichila, 2200 m, 24.IV.1984 (Löbl & Smetana) (MNHG).

Paratypes, 2 females: as holotype (MHNG) 1; Chichila, 1900-2000 m, bushes near village (Martens & Schawaller) (SMNS) 1.

D i a g n o s i s . Medium-sized species, elytron maculate, vaulted between two discal rows of coarse punctures. Lateral portion of metasternum coarsely punctate. First ventrite with medio-basal protuberance; tibiae striate. Tip of aedeagus inflexed, parameres slender.

D e s c r i p t i o n . Length 2.6 - 2.7 mm, width 1.7 - 1.8 mm. Head and pronotum dark reddish-brown, most of pronotal disc darker than head. Elytron blackish-brown or black near base, along sutural stria, at middle, and near apical margin; with oblique reddish fascia on anterior half and with large ochreous spot covering most of apical half. Hypomeron, prosternum and mesosternum reddish, remaining ventral surface of thorax blackish. Basal abdominal ventrites very dark redish brown to blackish, apical segments paler. Antennae and legs reddish or ochreous. Relative length of antennomeres as follows: II 26, III 44, IV 58, V 50, VI 62, VII 64, VIII 68, IX 58, X 50, XI 52 (holotype). Pronotum uniformly, very finely punctate, not microsculptured. Exposed portion of scutellum fairly large. Elytron with deep, coarsely punctate sutural stria; sutural area raised; humeral protuberance absent, most of discal surface impunctate or extremely finely punctate; irregular coarse punctation situated near base and on anterior half of lateral portion; two regular long discal rows of coarse punctures lying in depressions separated by vaulted interval, additional short row of coarse punctures situated between sutural stria and inner long row. Propygidium and pygidium with microsculpture consisting of punctures. Hypomeron glabrous, without microculpture. Mesepisternum extremely finely punctate. Mesosternum convex, lacking median ridge, with a pair of large apical punctures, elsewhere extremely finely punctate, not striate. Center of metasternum impressed.

Median metasternal portion with dense transverse row of fairly coarse punctures and two irregular longitudinal rows of similarly coarse punctures. Lateral portion of metasternum very coarsely punctate. Mesepisternal suture deep, coarsely punctate. Ventrites with microsculpture consisting of punctures. Abdominal punctation extremely fine, first ventrite with conspicuous medio-basal protuberance; basal pits coarse, inner larger than outer ones. Tibiae striate, almost straight. In male ventrites without appreciable male sexual characters. Segments 1 to 3 of protarsus distinctly widened, segment 1 somewhat narrower than apex of tibia, following two gradually narrower. Aedeagus (Figs 174 to 176) 0.81 mm long. Median lobe with long, gradually narrowed apical portion; tip inflexed. Parameres almost straight, narrowed subapically, then weakly widened.

This species may be readily distinguished from other members of the genus by its colour pattern in combination with the elytral punctation. It resembles *B. distinctum* and its allies in many characters but differs drastically in having striate tibiae, a large medio-basal protuberance on 1st ventrite, long and inflexed apical portion of median lobe and slender parameres.

Mystrix Champion

Mystrix Champion, 1927; type species *Mystrix* termitophilum Champion, 1927, by monotypy.

Mystrix includes two species, *M. termitophilum* known only from the "Haldwani Division of Kumaon" and *M. kistneri* Löbl from Sumatra. *M. termitophilum* is the sole member of the termitophilous "Baeoceritae" (ACHARD 1924a). in the Indian sub-continent.

The genus may be easily distinguished from other Himalayan scaphidiid genera by the conspicuously pubescent body and flattened femora, and by the combination of the entire eye, the extremely small antennomeres III and IV, the ventrally strongly vaulted body, and the distinct metacoxal lines.

A new record of *M. termitophilum* is a specimen from Nepal, Parsa distr., Birganj Lothar, 450 ft., 13-19.IX.1967, malaise trap (Canadian Nepal Exp.) (CNC).

BIOGEOGRAPHY

The very diverse Himalayan flora has been characterized in SCHWEINFURTH (1957), and analysed in STAINTON (1972). It belongs, according to MEUSEL & al. (1965) and MEUSEL & SCHUBERT (1971), to the Sino-Japanese phytogeographic realm. DOBREMETZ (1972) found the Himalayan flora distinct from that of the latter, as well as from that of the Indian and Central Asian realms. TROLL (1967) distinguishes five main divisions, viz. the Assam-, Sikkim-, Garhwal-, Punjab-, and Indus-Himalaya. DOBREMETZ (1972) recognised three phytogeographic subregions, the East Himalayan ("Assam Himalaya" i.e., actual Arunachal Pradesh, and most of Bhutan), the West Himalaya including Kashmir and a part of Hindu Kush, and the Central Himalaya which is a transitional area including Garhwal, Kumaon, Nepal, Sikkim, and parts of Bhutan. Four areas are distinguished within Nepal (DOBREMETZ 1972, MARTENS 1979): the relatively narrow Eastern Nepal (between Sikkim and Arun Valley, with moist monsoon climate and absence of xerophilic vegetation), Central Nepal (between Arun Valley and Daulagiri, with less moist monsoon climate in which hygrophilic, mesophilic and xerophilic vegetation co-exist, possibly best characterized by the oak forests (*Quercus semecarpifolia*, *Q. lanuginosa*)), Western Nepal (with dryer seasonal climate and mesophilic and xerophilic vegetation (with *Quercus incana*, *Cedrus deodara*, *Abies pindrow*, *Olea*

cuspidata)), and North-Central Nepal (in rain shadow, north of Daulagiri, Annapurna, Manaslu, etc., with highland steppe vegetation).

The high biodiversity of the Himalaya may be explained by both historical and ecological factors. It is a transitional zone inhabited by taxa of southern (Indian), eastern (Chinese, Burmese) and western (Mediterranean, Central Asian) origin (MANI 1974, MARTENS 1979). An other conspicuous pattern of the Himalaya is the altitudinal range of the vegetation reaching over 6000 m, forming 10 (DOBREMETZ 1972) or 11 (MARTENS 1979) zones. The taxa of presumably southern and eastern origin become gradually less frequent westward and are confined to lower altitudes.

The available data on Agathidiini (Leiodidae) and on Scaphidiidae are possibly significant for Himalayan fungivorous beetles. The Agathidiini are a predominantly Holarctic group with more than 400 recognised species. Only a smaller portion of them extends to the tropics or subtropics of south and southeastern Asia (Angelini, pers. commun.). The myxomycetophagous *Agathidium* species are extremely diverse in the Himalaya where about 110 species have been encountered (LAWRENCE 1989). Most of them appear to be endemic in some parts of the Himalaya, including its western portion and the Hindu Kush - Kohistan ranges.

The Scaphidiidae, with roughly 1300 known species, feed on Myxomycetes and on a variety of other fungi. They are most speciose in areas with moist, warm climate, and poorly represented in areas with temperate or dry climate. Nevertheless, like the Agathidiini they are remarkably diverse in the Himalaya. The examined collections include 206 identified scaphidiid species in 18 genera (including those from Meghalaya), and several additional species which have not been identified. However, their distributional pattern is different from that of the Agathidiini. No endemic species occurs in the Hindu Kush - Kohistan ranges, nor in Karakorum and in Kashmir, although 16 species were collected there. Two of them, *Scaphium quadraticolle* Solsky and *Scaphisoma assimile curvistria* Reitter, also occur north and northwest of Hindu Kush and Karakorum. All others species were found further eastward, most of them east of the Sutlej river, and their origin is presumably southern or eastern.

The number of the species (only the identified ones taken in account), and of the apparently endemic species per area increases from west to east: 35 species with 2 (5.7%) endemics in Himachal Pradesh, 58 species with 6 (10.3%) endemics in Garhwal and Kumaon, 129 species with 38 (29.5%) endemics in Nepal. In the Darjeeling district in West Bengal, including the unrepresentative data from Sikkim and Bhutan, 80 species with 18 (22.5%) endemics have been found.

It is hazardous to compare these numbers with those obtained from collections made in 4 days of field work in the Manas National Park in Assam (25 species, with 6, e.g., 24% endemics) or in 11 days of field work in the Khasi and Garo Hills in Meghalaya (where 61 species, with 19, e.g., 31.1% endemic were found, see LÖBL 1984; 1986a). The data from Meghalaya and from the Manas National Park are almost exclusively based on material collected by C.Besuchet and the present author on a single trip (see Löbl 1986a) while those from Nepal, Uttar Pradesh and Himachal Pradesh are from the field work of several entomologists in different seasons and during longer periods. Thus, the distributional ranges of the taxa and their endemism as quoted in this paper do rather reflect the effort in field work invested for a particular area than a biological reality.

Nevertheless, the data suggest a surprisingly high diversity of the Meghalayan fauna and indicate the following distributional pattern.

As in many other groups (i.e., Collembola: Neanuridae, CASSAGNAU 1981; Staphylinidae: Quediini, SMETANA 1988), the diversity of scaphidiids in general decreases from the east to the west.

According to MANI (1968), nearly 60% of the high altitude beetle species are endemic to the Himalaya and 96% of them are Palaearctic forms. This is certainly not true for the scaphidiids: none of the Nepalese species may be derived from the West Palaearctic stock, and only few (e.g., *Scaphidium biundulatum*, *S. nepalense*, *S. gurung*, *Scaphisoma* species assigned to the *subalpinum* group) are probable derivates of the temperate Sino-Japanese fauna.

Scaphidiids exhibit high dispersal ability. From the 47 species recorded in South India, 20 (42.6%) occur in the Himalaya, and from the 61 species found to date in Meghalaya 41 (67.2%) occur also in the Himalaya. Actually, 206 species have been identified from the Himalaya and Meghalaya, 55 of these species (26.7%) extend their distributional range eastward beyond political border of India and/or to south India, and 16 species (7.8%) west- and/or southwestward.

Collections made in Phulcoki indicate a higher species diversity in the Mahabharat range than in the Inner Himalaya, at approximately the same meridian, and at altitudes ranging from 1600 to 2600 m. Most of the 38 species of scaphidiids inhabiting Phulcoki were found in oak forest, at 2000 to 2600 m altitude. The rate of the endemic scaphidiid species of Phulcoki (*Scaphisoma baloo* only) is very low in comparision with collections from the Inner Himalayan ranges.

It is difficult to speculate on biogeography when phylogeny of the group has not been analysed and the distribution of the taxa is known only partly. However, allopatric speciation may be supposed in groups of closely related vicarious species, such as *Scaphidium gurung* and *S. nepalense*, *Baeocera microptera* and *B. puncticollis*, or *Scaphisoma immodicum* and *S. bhareko*. The number of apparently endemic species in some areas, as in the upper Kali Gantaki Valley or at Ghoropani Pass is relatively high, but little or no information is available from nearby Daulagiri or from the southern slopes of Annapurna.

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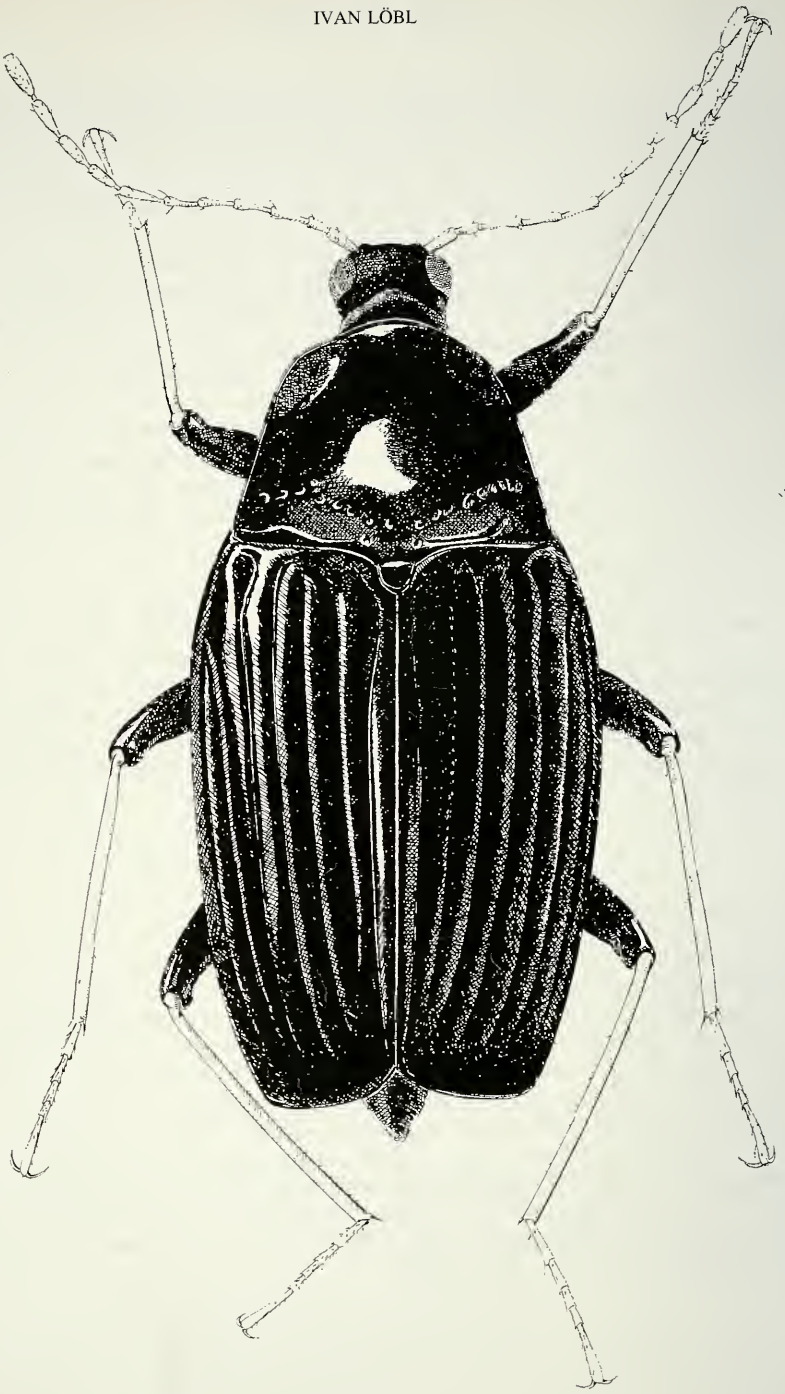
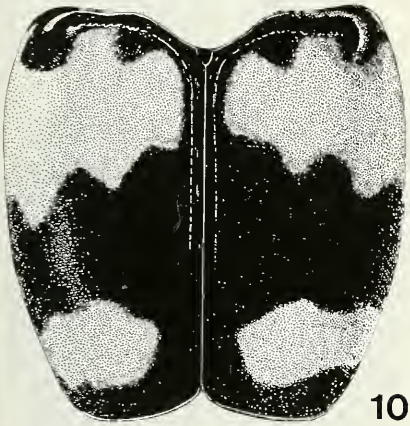
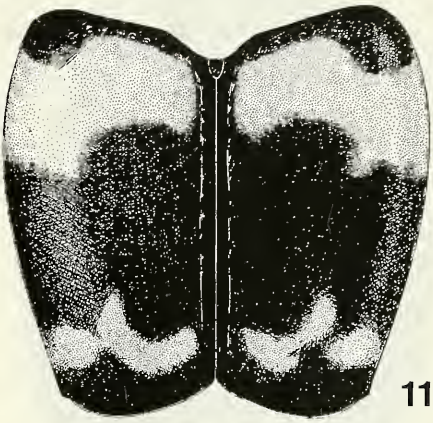
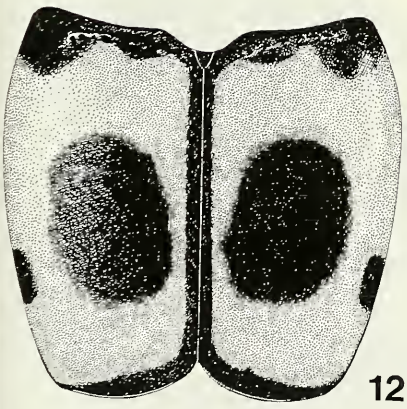


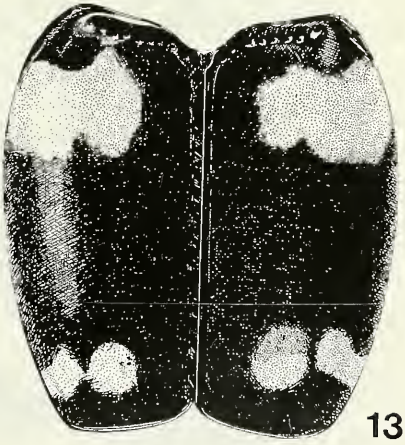
FIG. 9.

Ascaphium ochripes sp. n.



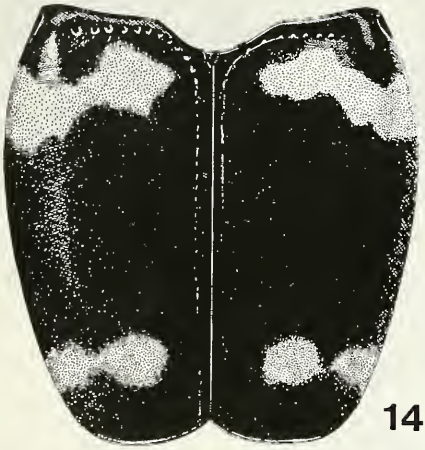


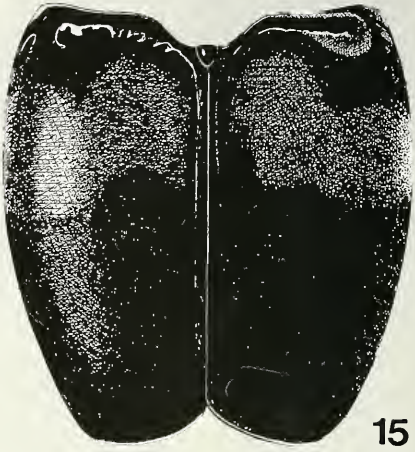


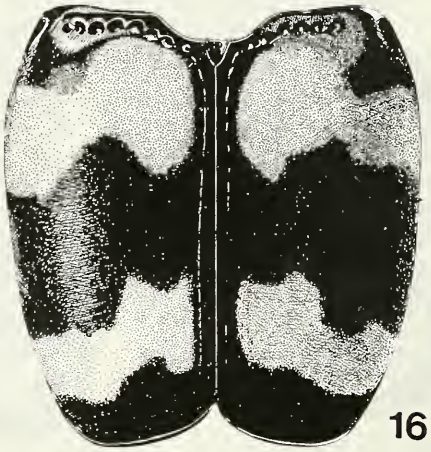


FIGS 10 TO 13.

Colour pattern of elytra in *Scaphidium*; 10. *S. biundulatum* Champion; 11. *S. fryi* Achard; 12. *S. incrassatum* Achard; 13. *S. nepalense* sp. n.

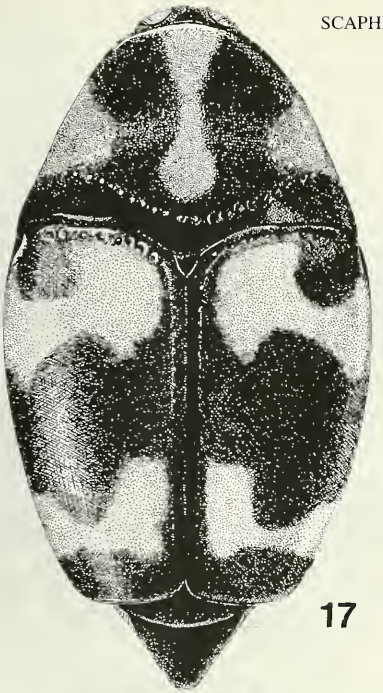


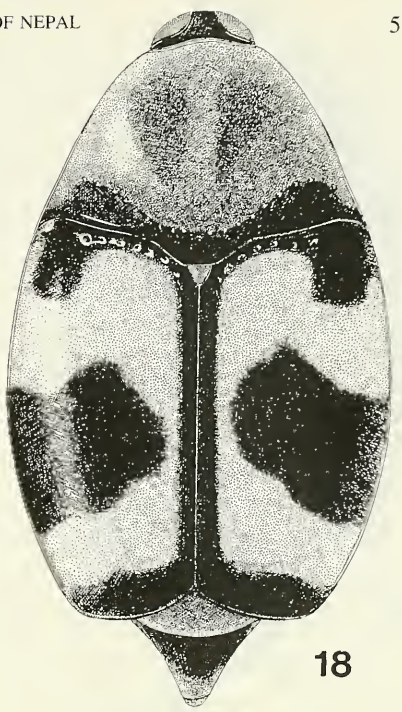


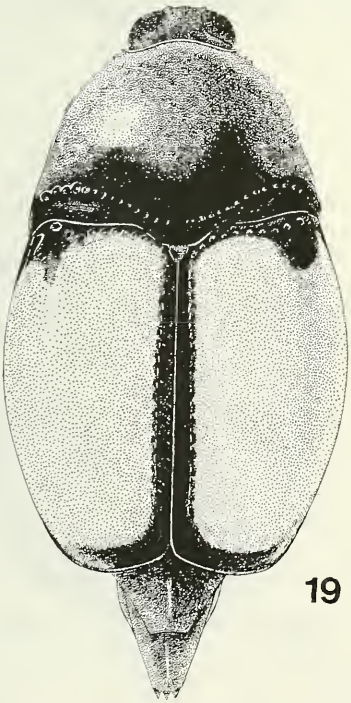


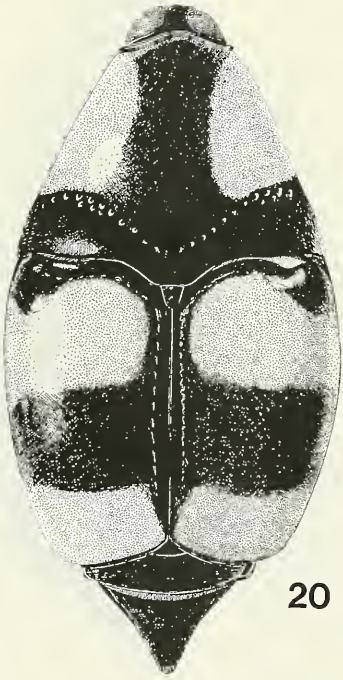
FIGS 14 TO 16.

Colour pattern of elytra in *Scaphidium*; 14. *S. gurung* sp.n.; 15. *S. sylhetense* Achard; 16. *S. harmandi* Achard.



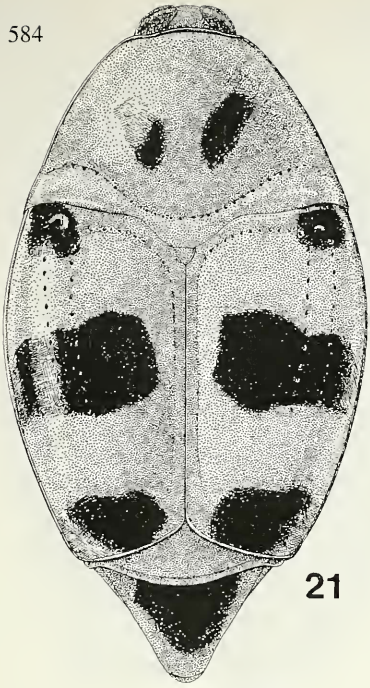


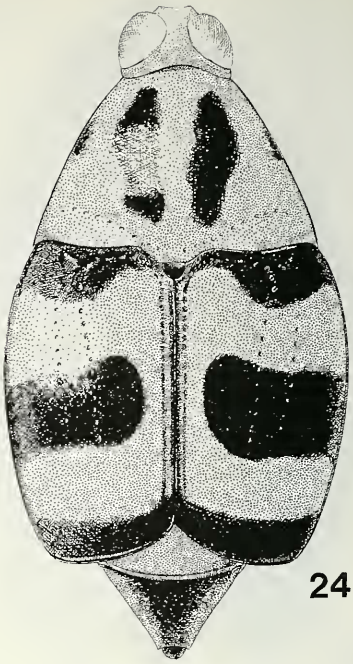


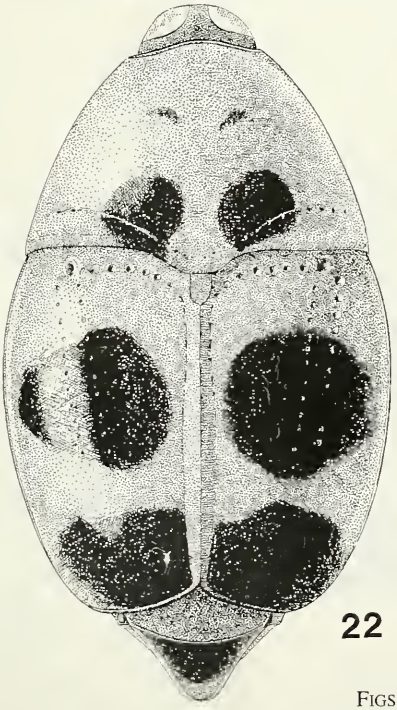


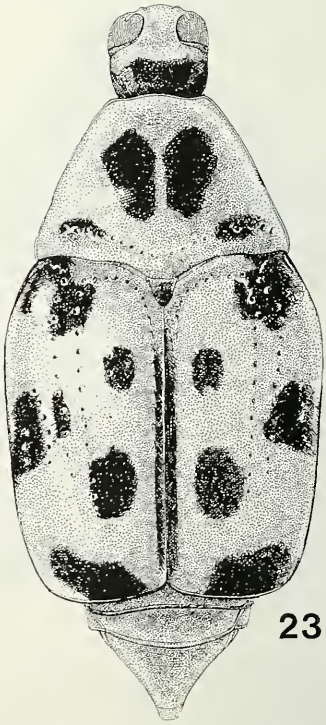
FIGS 17 TO 20.

Colour pattern in *Scaphidium*; 17. *S. sinense* Pic; 18. *S. semilimbatum* Pic; 19. *S. rubritarse* Pic; 20. *S. coomani* (Pic).



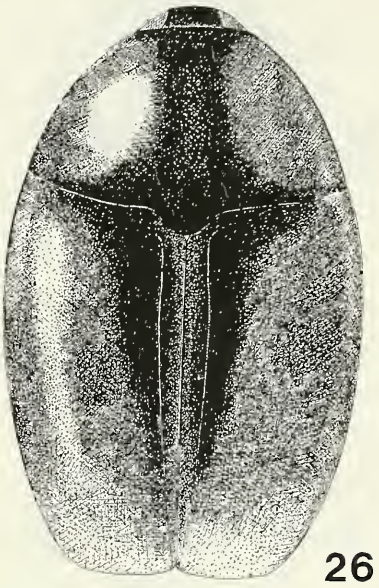


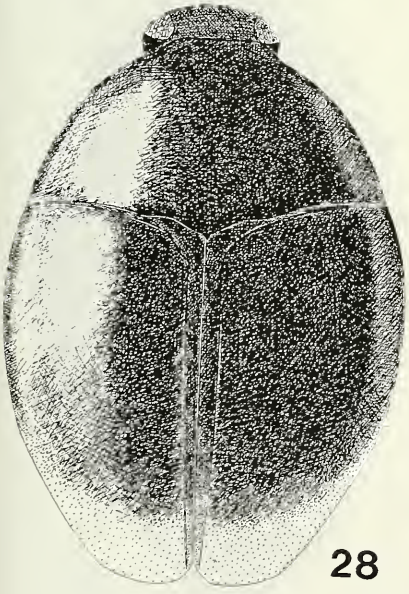


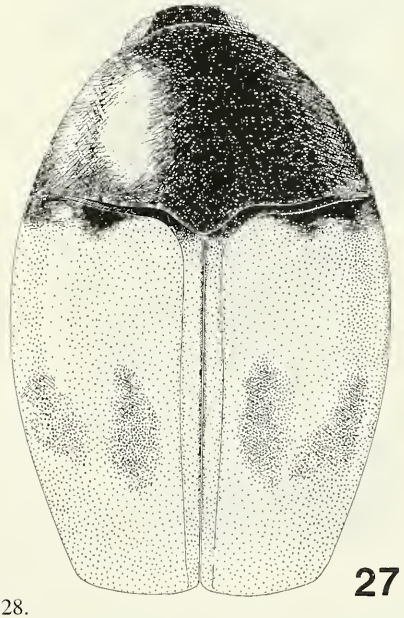


FIGS 21 TO 24.

Colour pattern in *Scaphidium* und *Hemiscaphium*; 21. *S. septemnotatum* Champion, 22. *Scaphidium* sp.; 23. *S. baconi* Pic; 24. *H. brunneopictum* Achard.

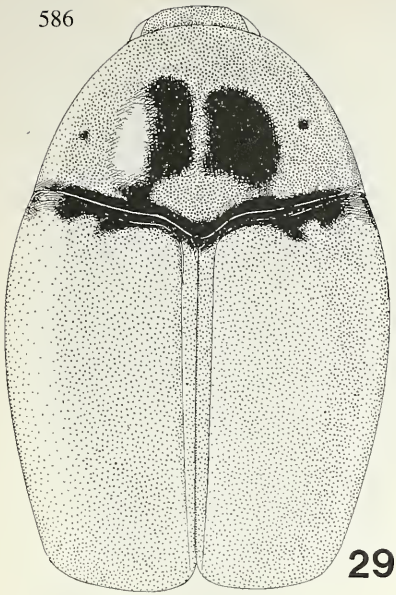


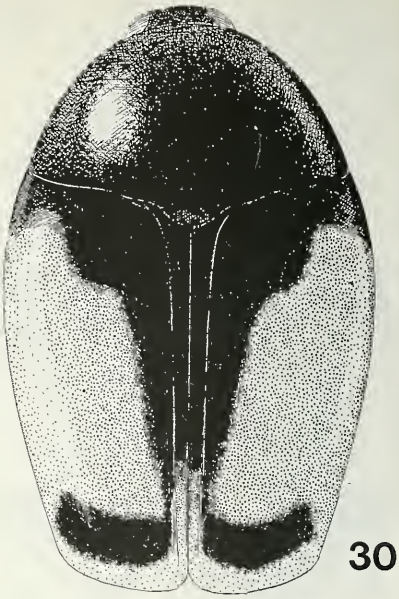


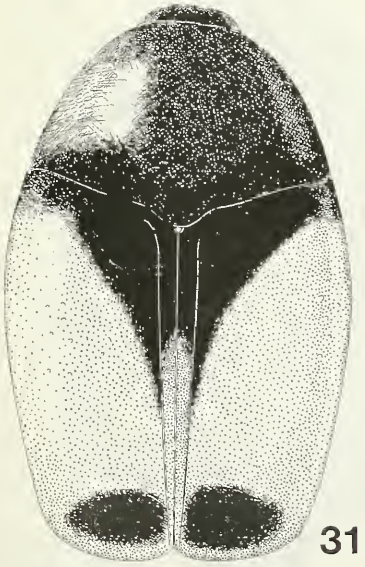


FIGS 25 TO 28.

Colour pattern in *Pseudobironium* and *Scaphisoma*; 25. *P. bicolor* sp.n.; 26. *S. cruciatum* Champion; 27. *S. aurorae* sp.n.; 28. *S. baloo* sp. n.

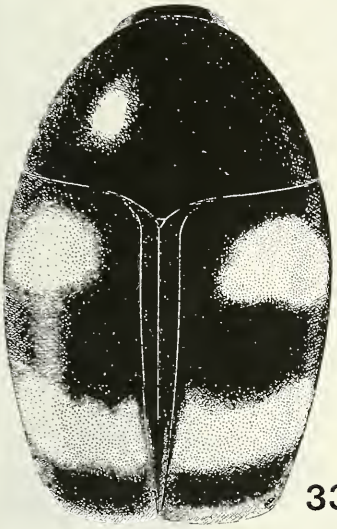


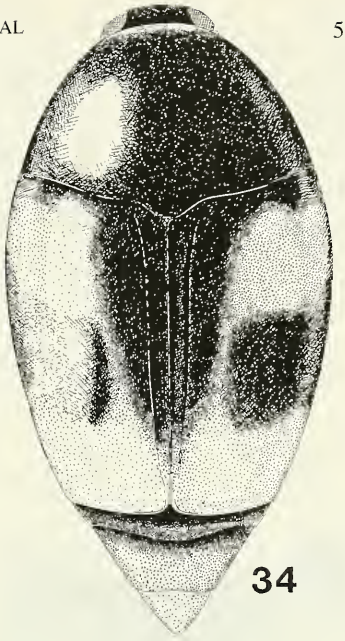


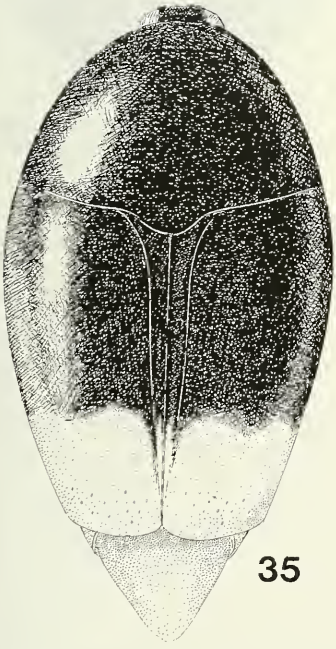


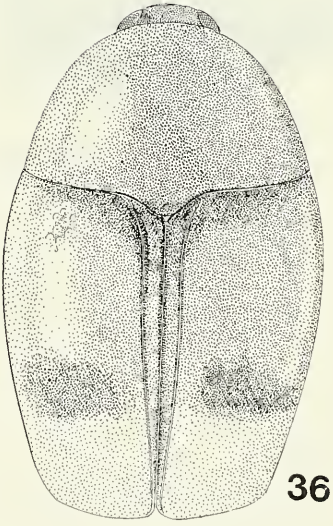
FIGS 29 TO 32.

Colour pattern in *Scaphisoma*: 29. *S. clavigerum* sp. n.; 30. *S. bhareko* sp. n.; 31. *S. varium* Löbl; 32. *S. pulchellum* Löbl.



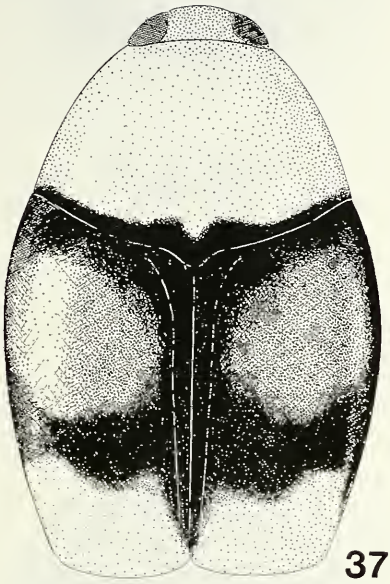


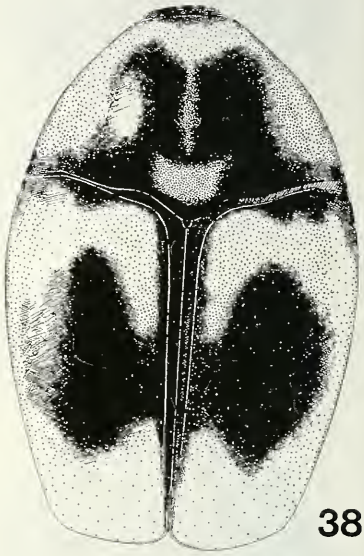




FIGS 33 TO 36.

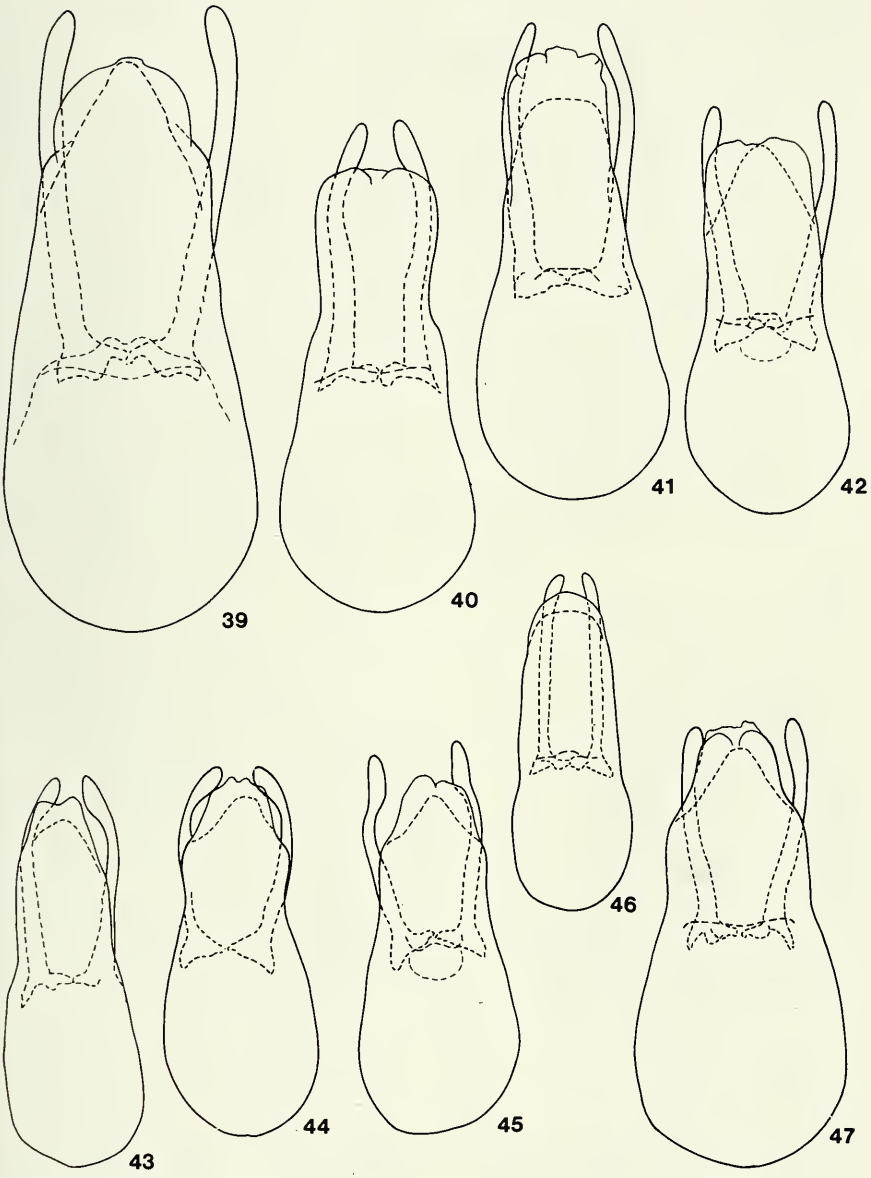
Colour pattern in *Scaphisoma*; 33. *S. quadrifasciatum* Löbl; 34. *S. tetrastictum* Champion; 35. *S. leucopyga* Champion; 36. *S. binhanum* (Pic).





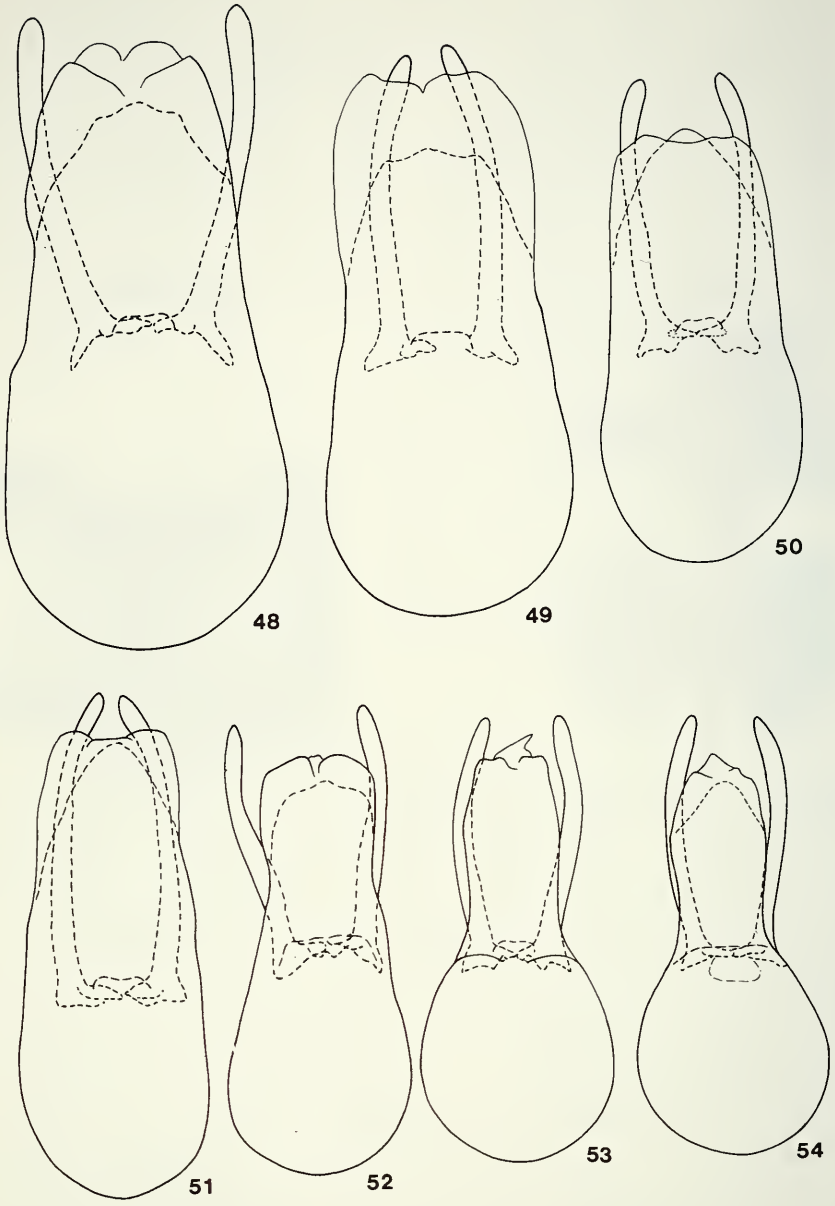
FIGS 37 AND 38.

Colour pattern in *Scaphisoma*, 37. *S. maculiger* Löbl; 38. *S. notatum* Löbl.



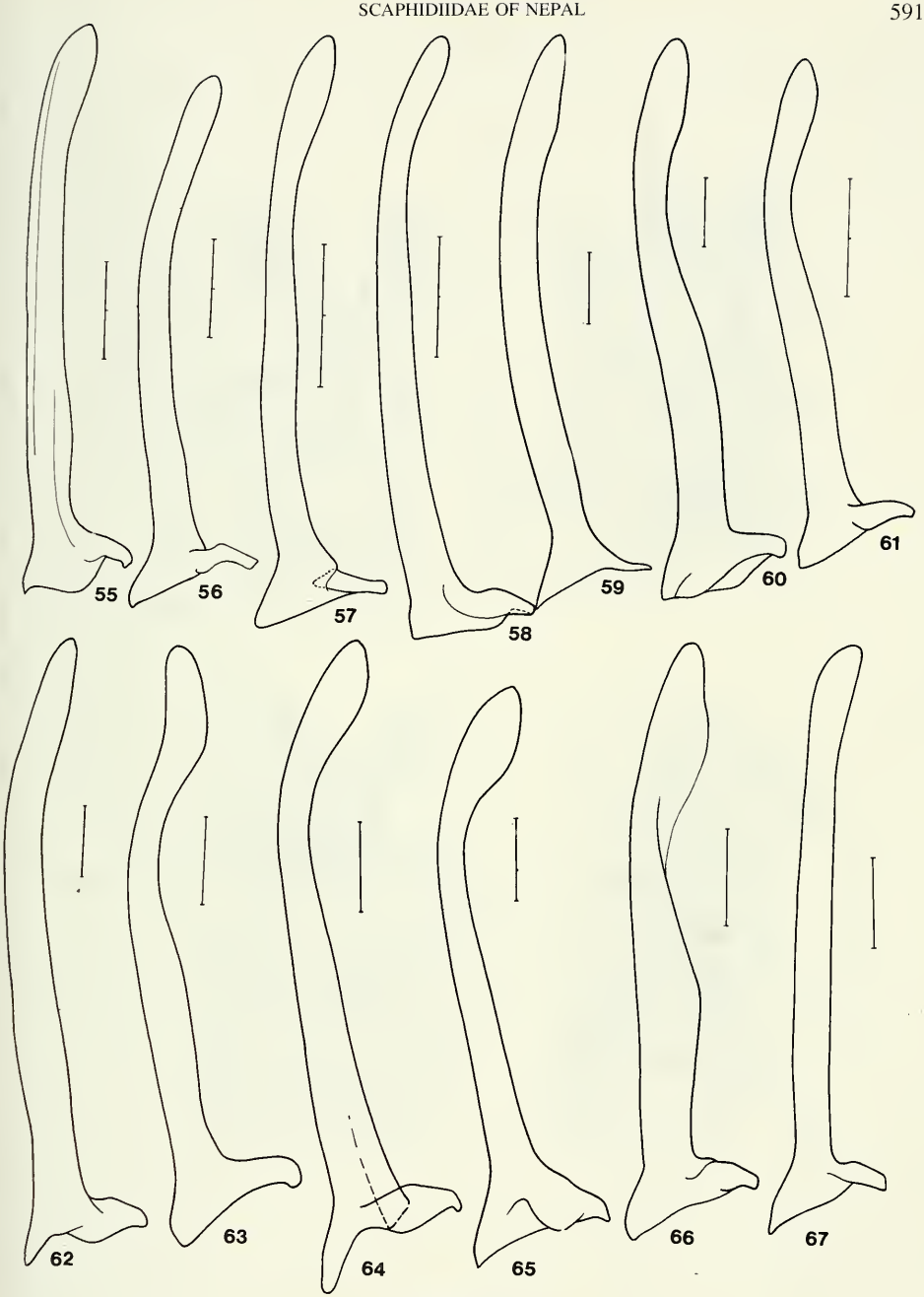
FIGS 39 TO 47.

Aedeagi in *Scaphidium* and *Hemiscaphium*; 39. *S. grande* Gestro; 40. *S. harmandi* Achard; 41. *S. rubritarse* Pic; 42. *S. cyanellum* Oberthur; 43. *S. coomani* (Pic); 44. *S. septemnotatum* Champion; 45. *S. cinnamomeum* Champion; 46. *H. brunneopictum* Achard; 47. *S. baconi* Pic.



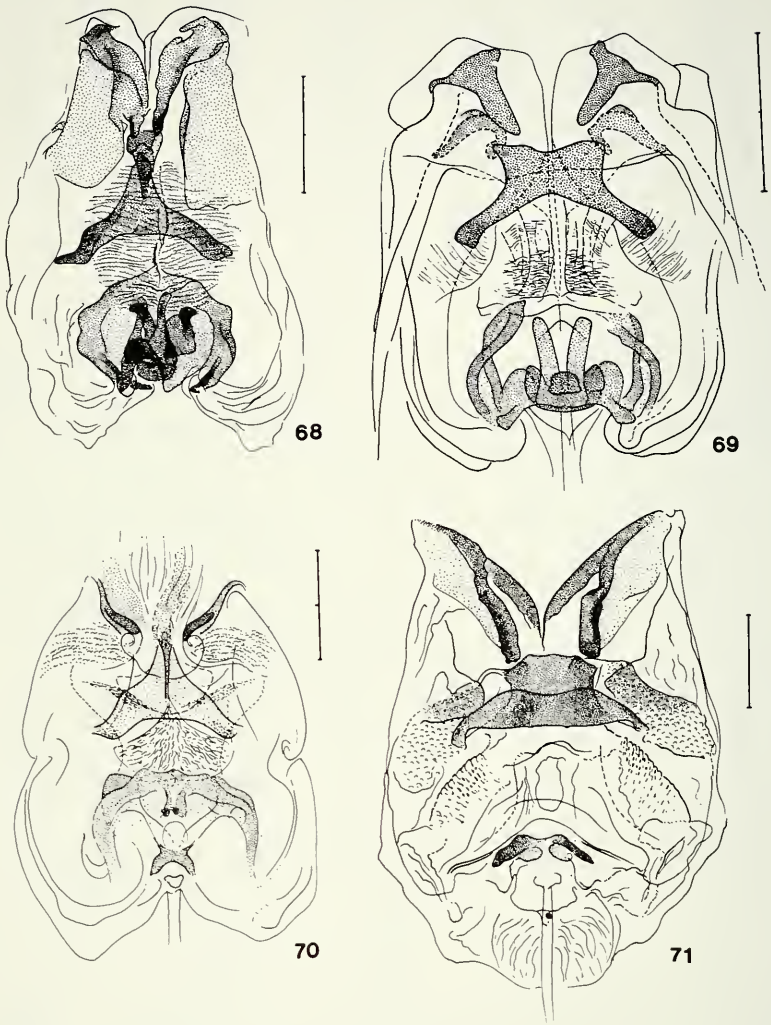
FIGS 48 TO 54.

Aedeagi in *Scaphidium*: 48. *S. biundulatum* Champion; 49. *S. gurung* sp. n.; 50. *S. nepalense* sp. n.; 51. *S. biseriatum* Champion; 52. *S. thakali* sp. n.; 53. *S. sylhetense* Achard; 54. *S. holzschuhi* sp. n.



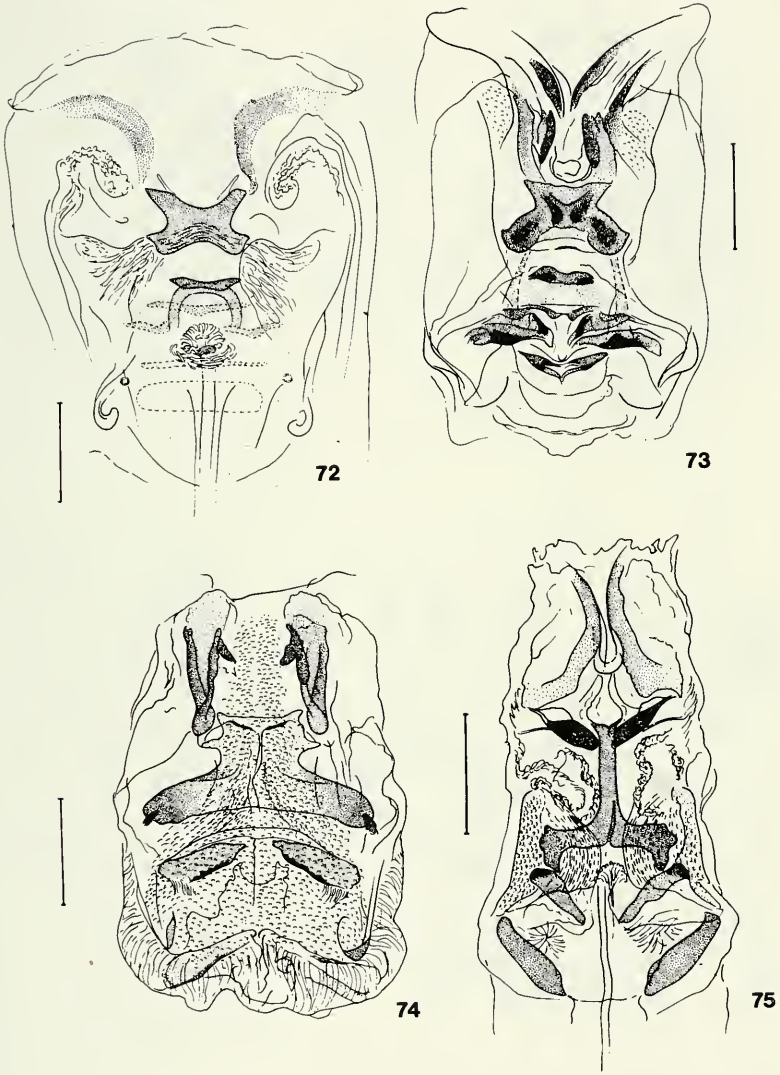
FIGS 55 TO 67.

Parameres in *Scaphidium* and *Hemiscaphium*; 55. *S. grande* Gestro; 56. *S. gurung* sp. n.; 57. *S. nepalense* sp. n.; 58. *S. biseriatum* champion, 59. *S. sylhetense* Achard; 60. *S. thakali* sp. n.; 61. *S. harmandi* Achard; 62. *S. rubritarse* Pic; 63. *S. cinnamomeum* Achard; 64. *S. cooniani* (Pic); 65. *S. septemnotatum* Champion; 66. *S. melanogaster* sp. n.; 67. *H. brunneopictum* Achard. Scale bar = 0.1 mm.



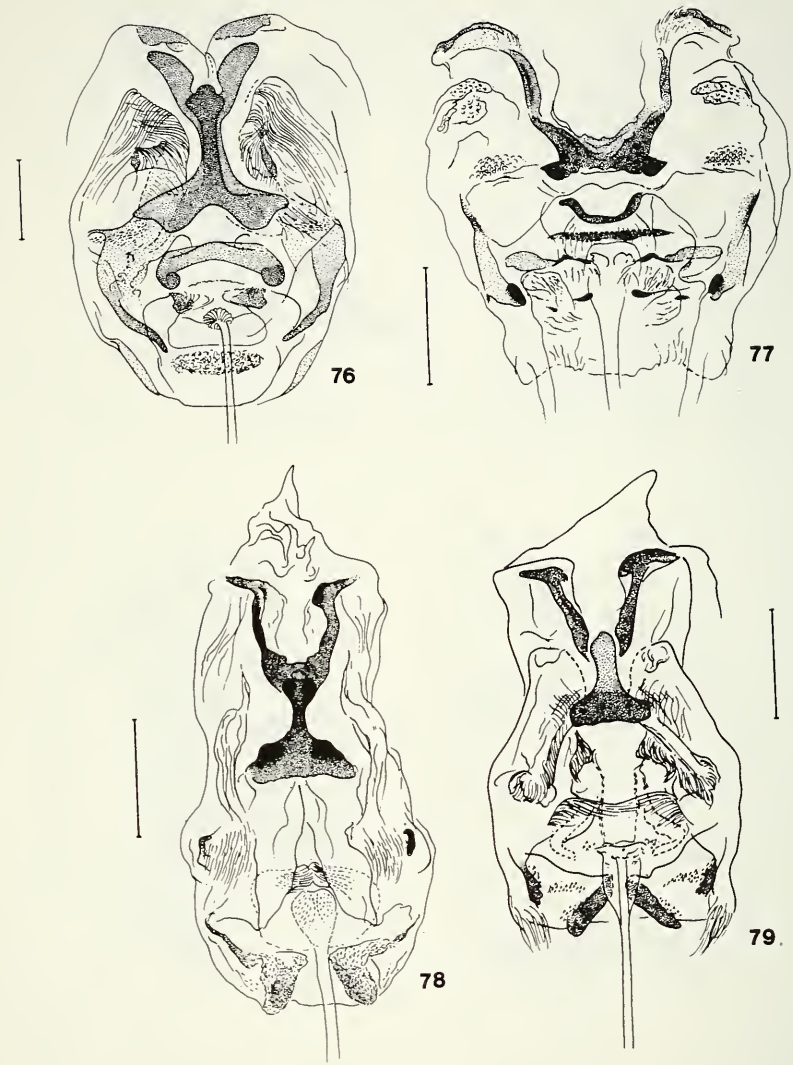
FIGS 68 TO 71.

Internal sac of aedeagi in *Scaphidium*; 68. *S. biundulatum* Champion; 69. *S. nepalense* sp. n.; 70. *S. gurung* sp. n.; 71. *S. grande* Gestro. Scale bar = 0.1 mm.



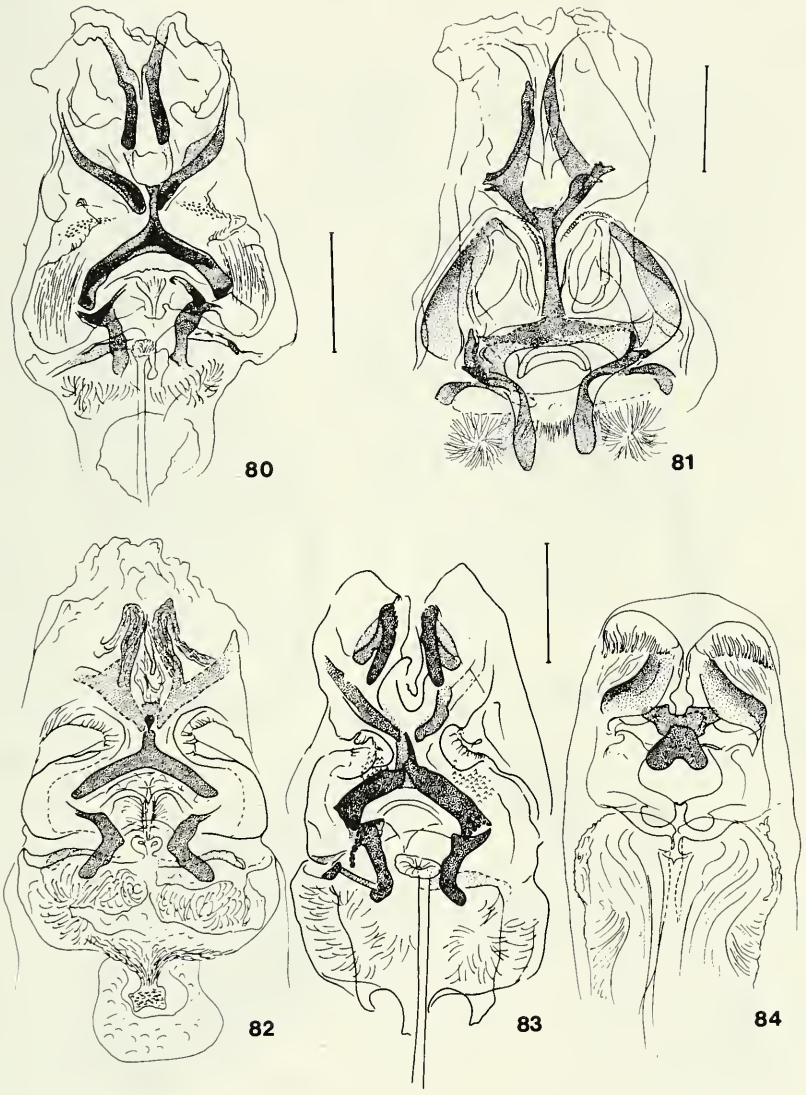
FIGS 72 TO 75.

Internal sac of aedeagi in *Scaphidium*; 72. *S. harmandi* Achard; 73. *S. rubritarse* Pic; 74. *S. cyanellum* Oberthur; 75. *S. coomani* (Pic). Scale bar = 0.1 mm.



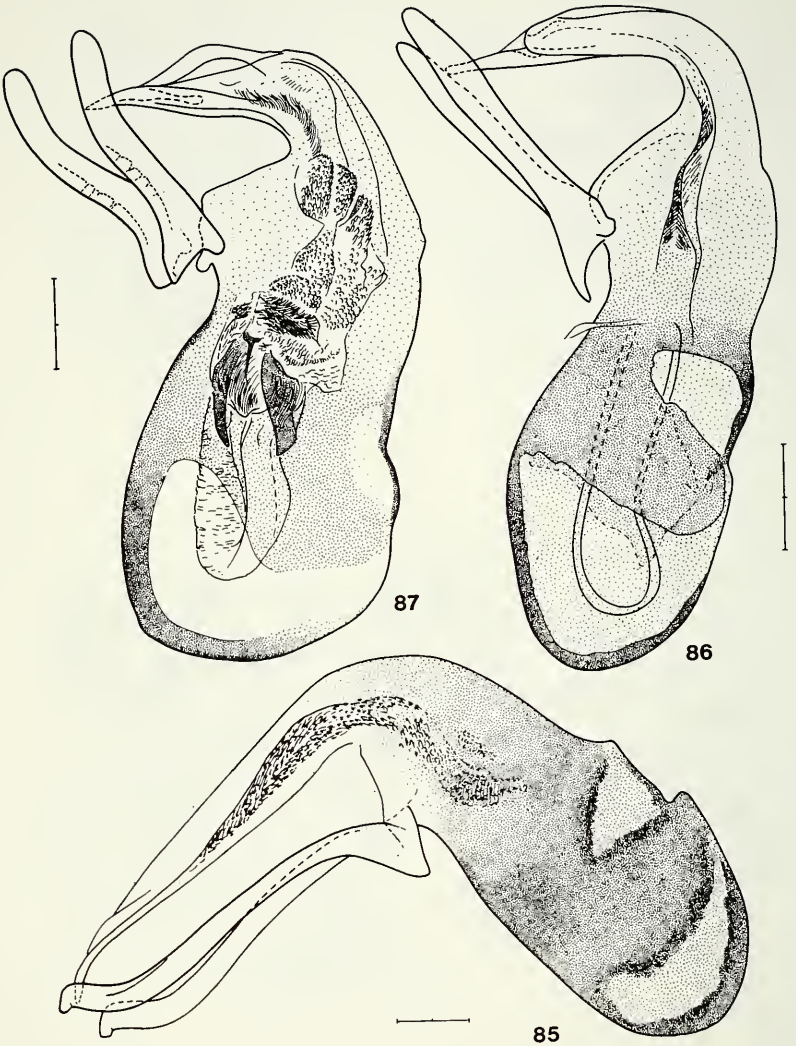
FIGS 76 TO 79.

Internal sac of aedeagi in *Scaphidium*: 76. *S. biseriatum* Champion; 77. *S. thakali* sp. n.; 78. *S. holzschuhi* sp. n.; 79. *S. sylhetense* Achard. Scale bar = 0.1 mm.



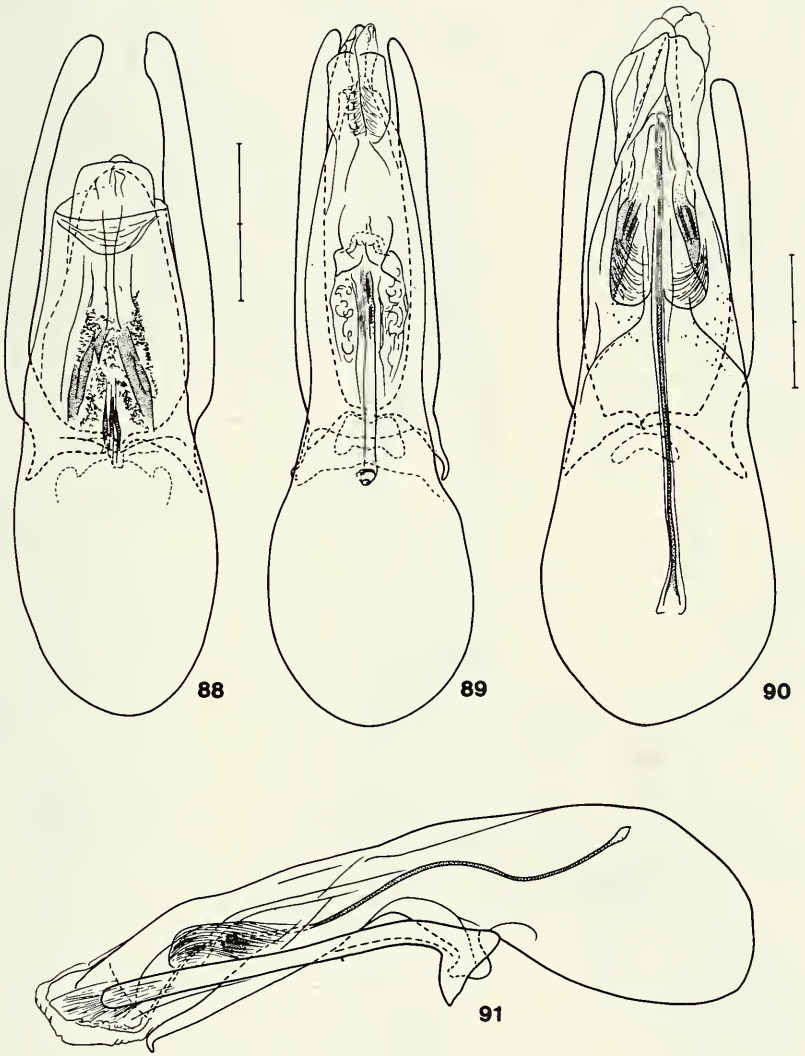
FIGS 80 TO 84.

Internal sac of aedeagi in *Scaphidium* and *Hemiscaphium*; 80. *S. septemnotatum* Champion; 81. *S. baconi* Pic; 82. *S. melanogaster* sp. n.; 83. *S. cinnamomeum* Champion; 84. *H. brunneopictum* Achard. Scale bar = 0.1 mm.



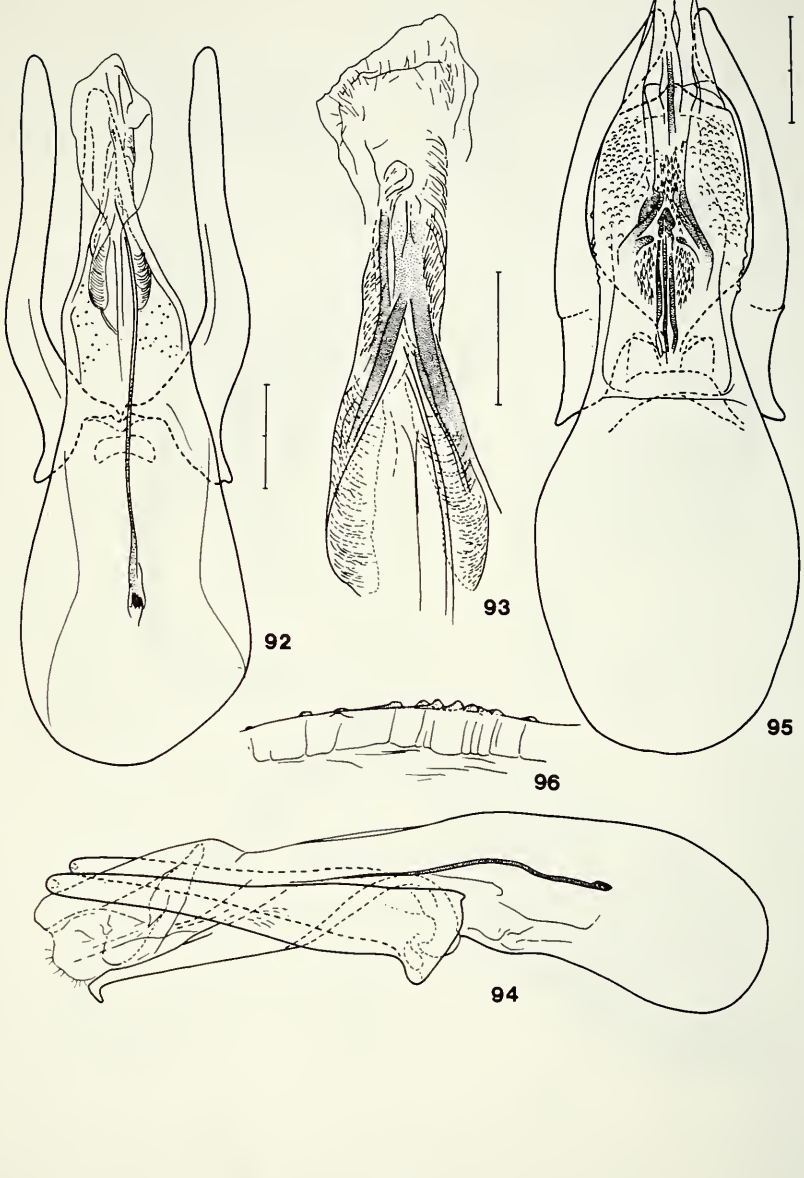
FIGS 85 TO 87.

Aedeagi in *Cyparium*; 85. *C. montanum* Achard; 86. *C. bowringi* Achard; 87. *C. plagipenne* Achard. Scale bar = 0.2 mm.



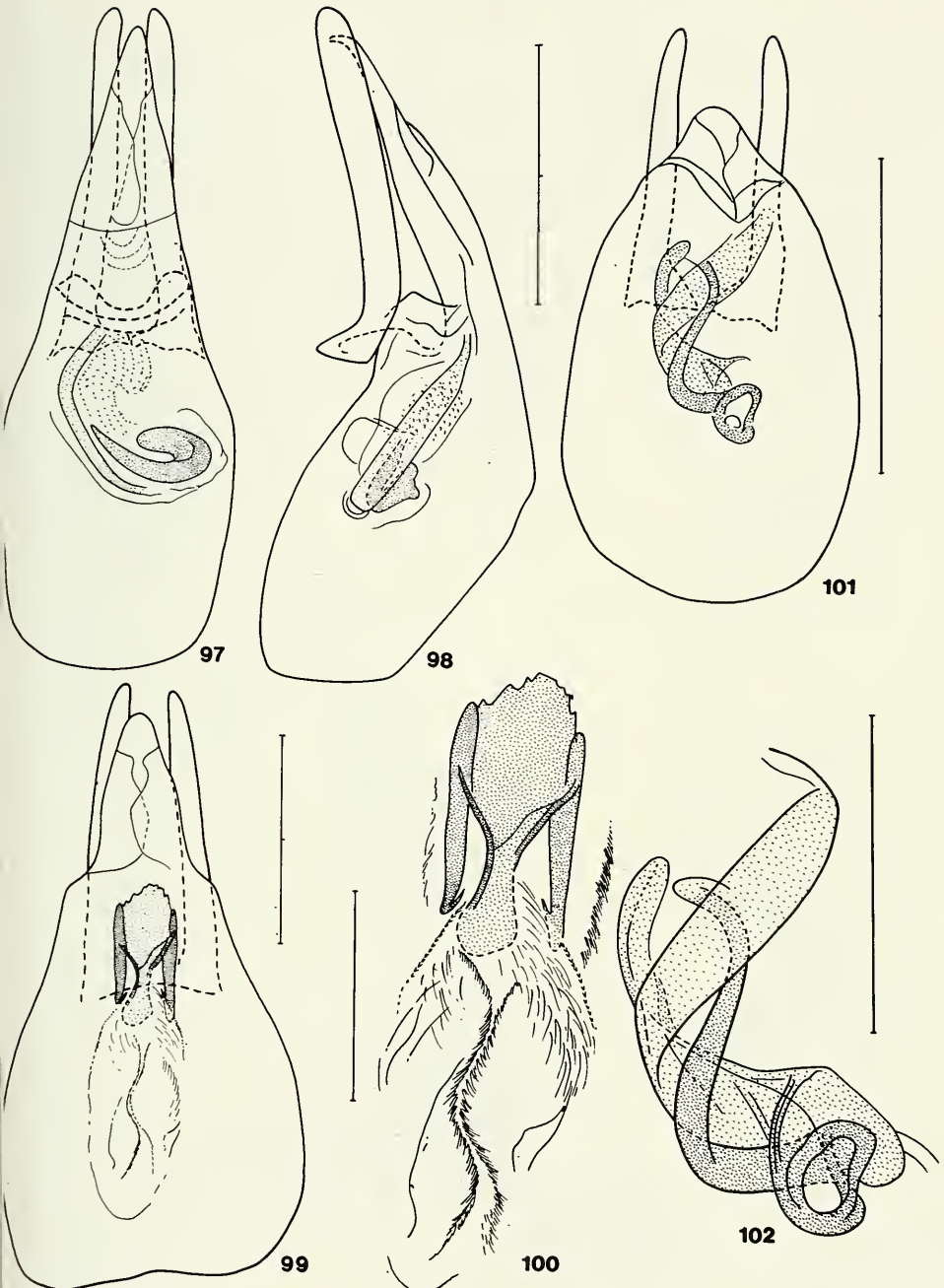
FIGS 88 TO 91.

Aedeagi in *Pseudobironium*; 88. *P. bicolor* sp. n., 89. *P. almoranum* Achard; 90, 91. *P. ineptum* sp. n. Scale bar = 0.2 mm.



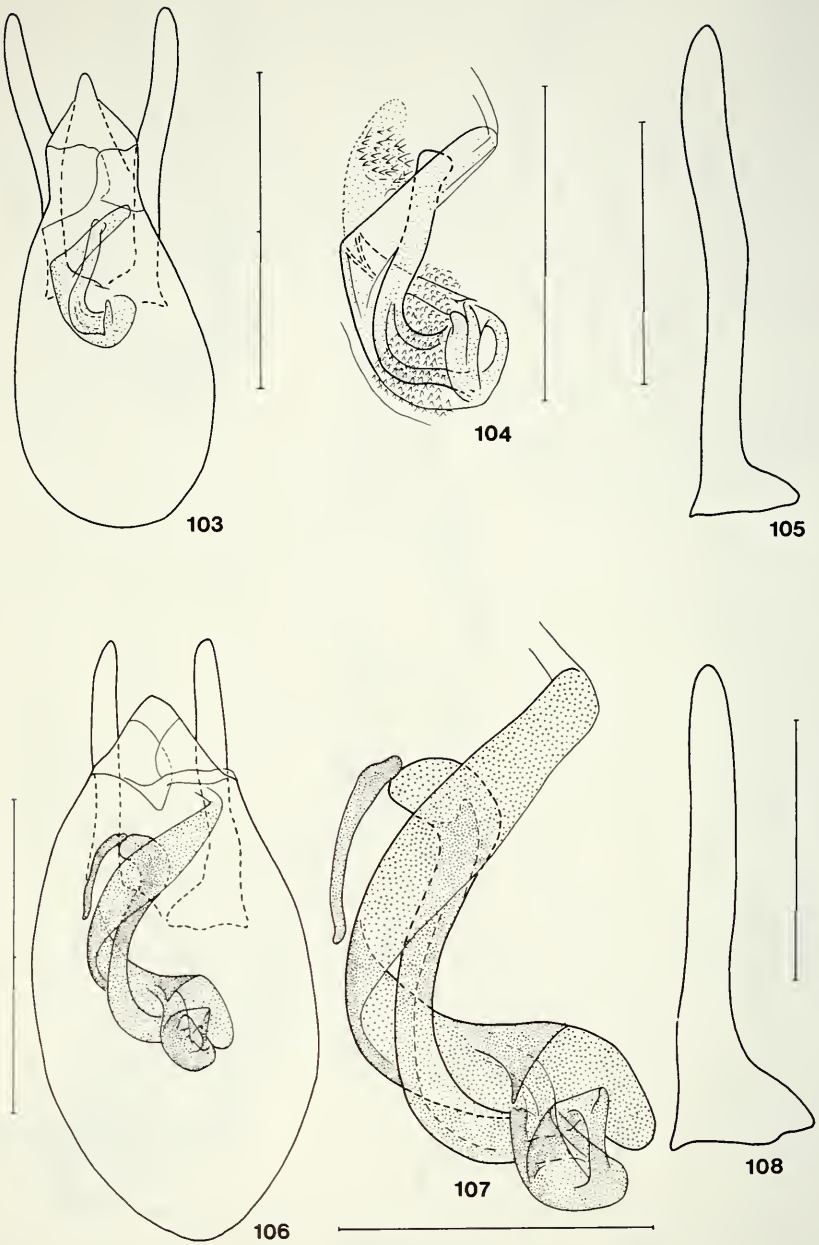
FIGS 92 TO 96.

Aedeagi in *Pseudobironium*; 92 to 94. *P. rufitarse* sp. n., apical portion of internal sac (93) in detail; 95, 96. *P. castaneum* Pic, tuberculate margin of internal sac (96) in detail. Scale bar = 0.2 mm (92, 95), and = 0.1 mm (96).



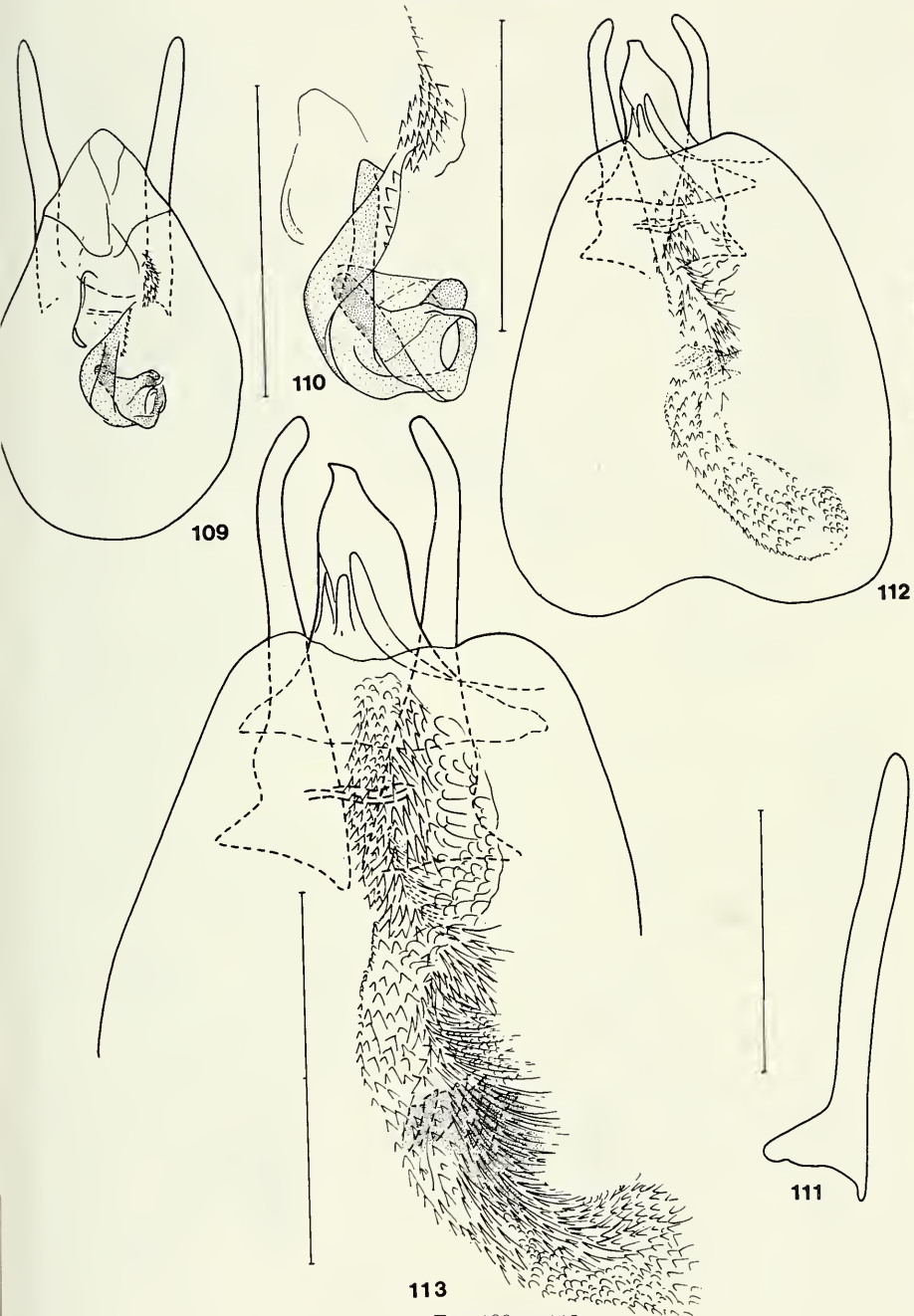
FIGS 97 TO 102.

Aedeagi in *Baeocera*. 97, 98. *B. sordidoides* sp. n.; 99, 100. *B. laminula* sp. n., internal sac (100); 101, 102. *B. reducta* sp. n., internal sac (102). Scale bar = 0.2 mm (98, 99, 101), and = 0.1 mm (100, 102).



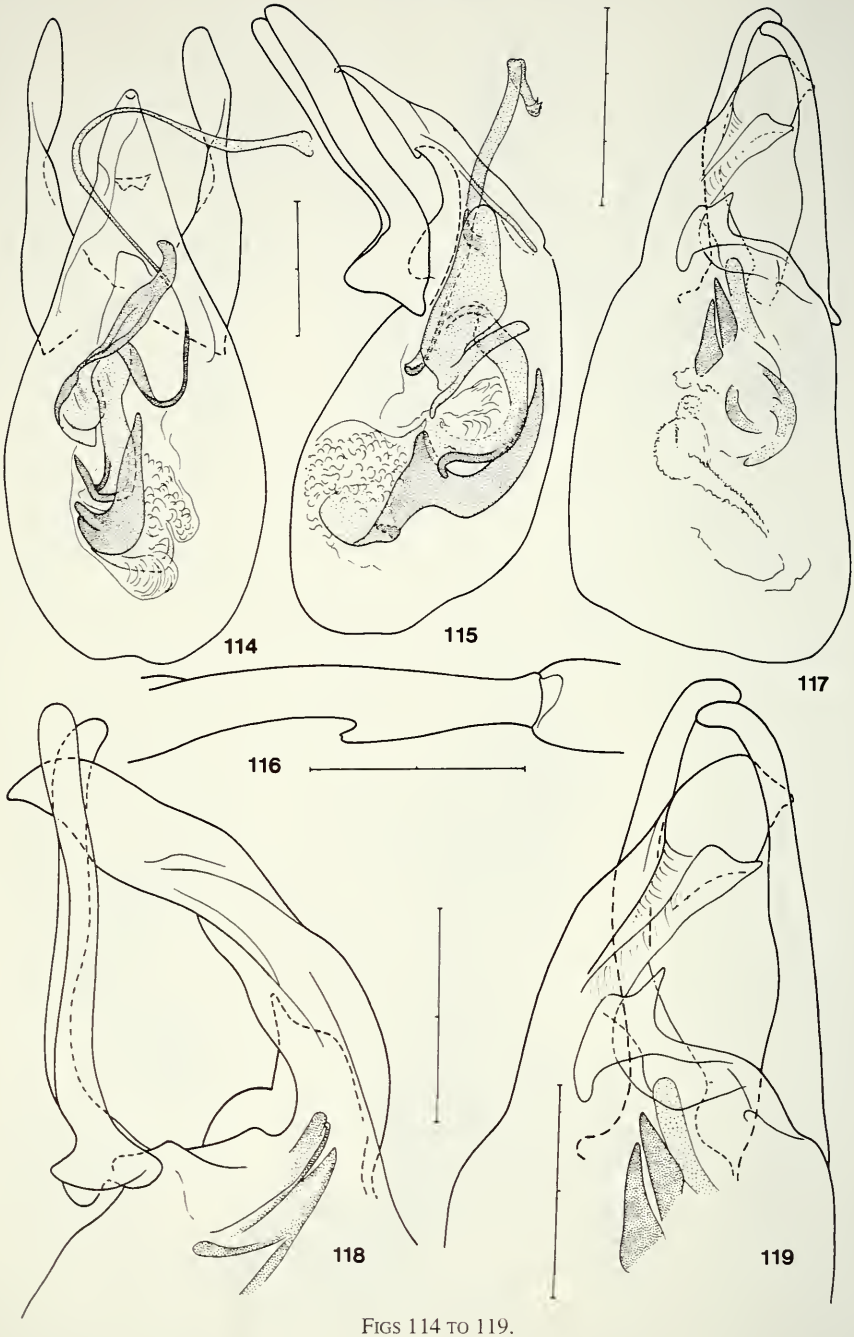
FIGS 103 TO 108.

Aedeagi in *Baeocera*; 103 to 105. *B. crinita* sp. n., internal sac (104), paramere (105); 106 to 108. *B. cribrata* sp. n., internal sac (107), paramere (108). Scale bar = 0.1 mm (104, 105, 107, 108), and = 0.2 mm (103, 105).



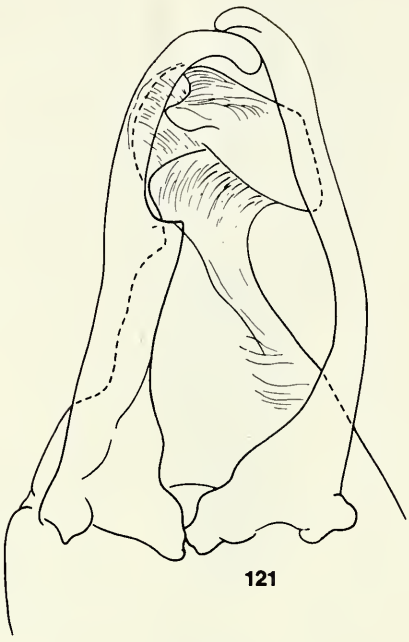
FIGS 109 TO 113.

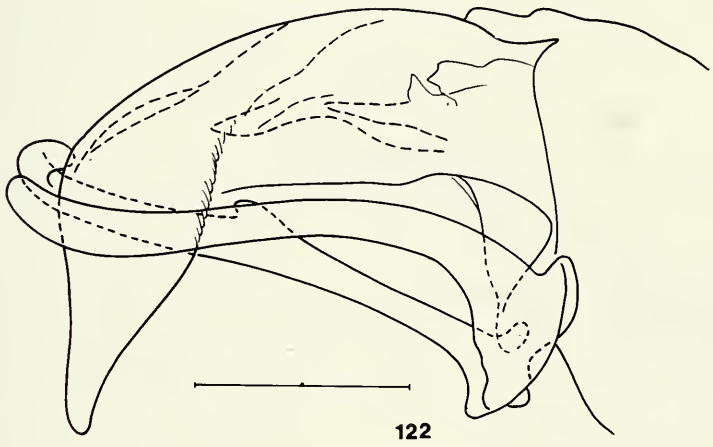
Aedeagi in *Baeocera*; 109 to 111. *B. martensi* sp. n., internal sac (110), paramere (111); 112 and 113. *B. schawalleri* sp. n., internal sac with apical portion of median lobe and parameres (113) at higher magnification. Scale bar = 0.1 mm (110, 111), = 0.2 mm (109, 113), and 0.3 mm (112).



FIGS 114 TO 119.

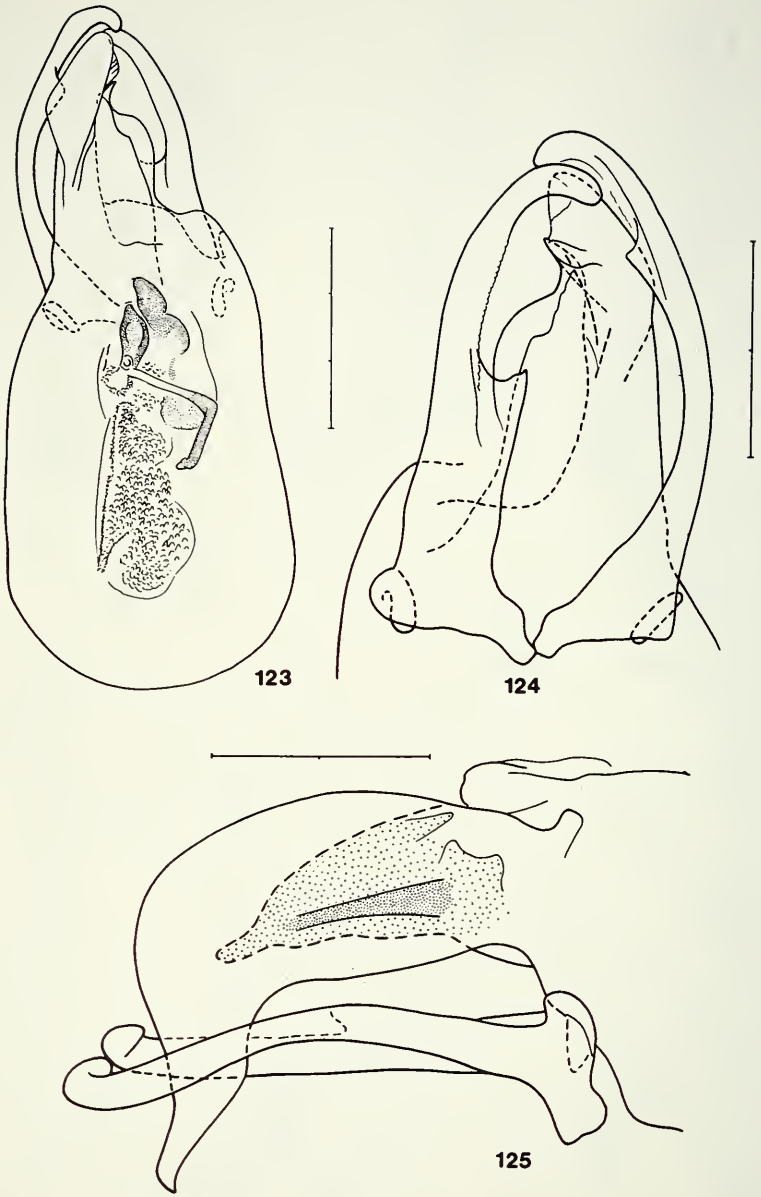
Baeocera; 114 and 115. *B. mustangensis* sp. n., aedeagus; 116 to 119. *B. thoracica* sp. n., basal portion of male metatibia (116), aedeagus (117), apical half of median lobe and parameres (118, 119). Scale bar = 0.2 mm (114 to 116, 118, 119), and = 0.3 mm (117).





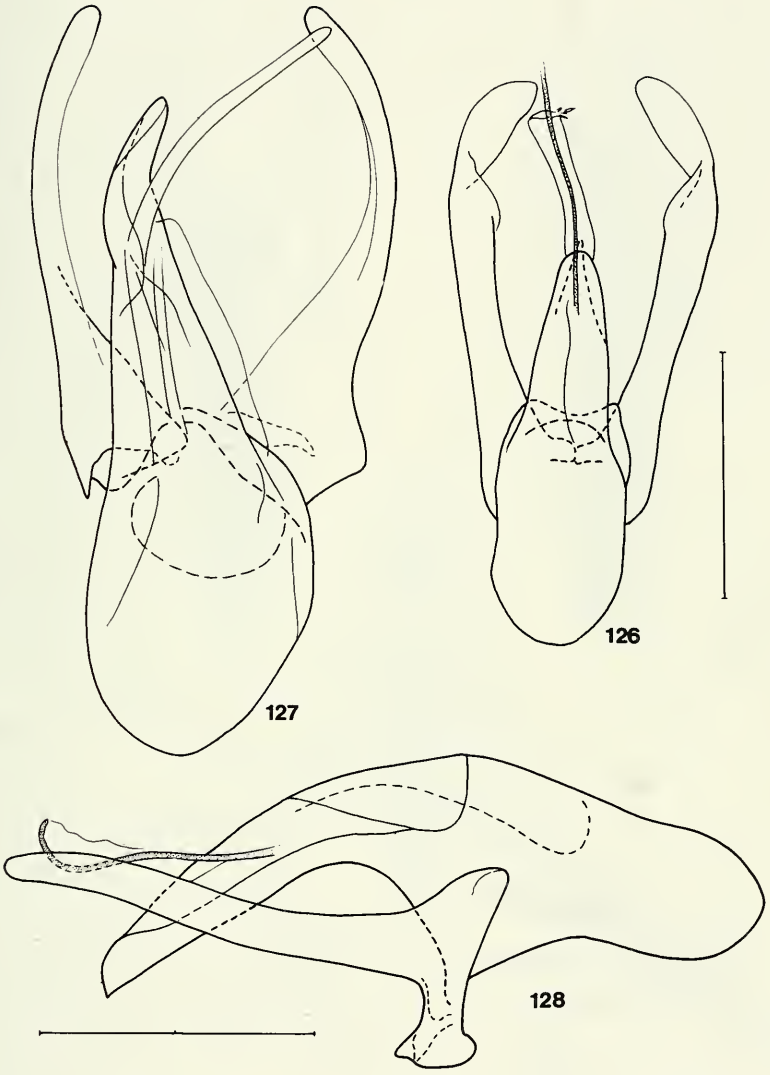
FIGS 120 TO 122.

Aedeagus in *Baeocera tuberculata* sp. n., apical portion of median lobe and parameres (121, 122) at higher magnification. Scale bar = 0.2 mm.



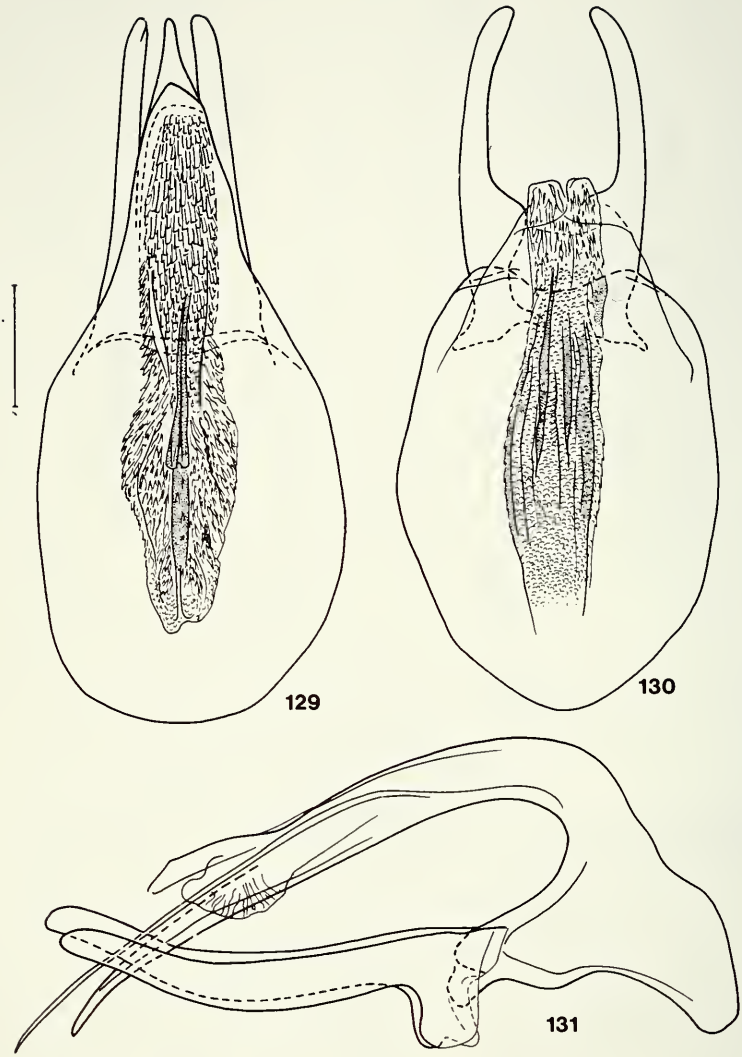
FIGS 123 TO 125.

Aedeagus in *Baeocera errabunda* sp. n., apical portion of median lobe and parameres (124, 125) at higher magnification. Scale bar = 0.2 mm (124), and = 0.3 mm (123).



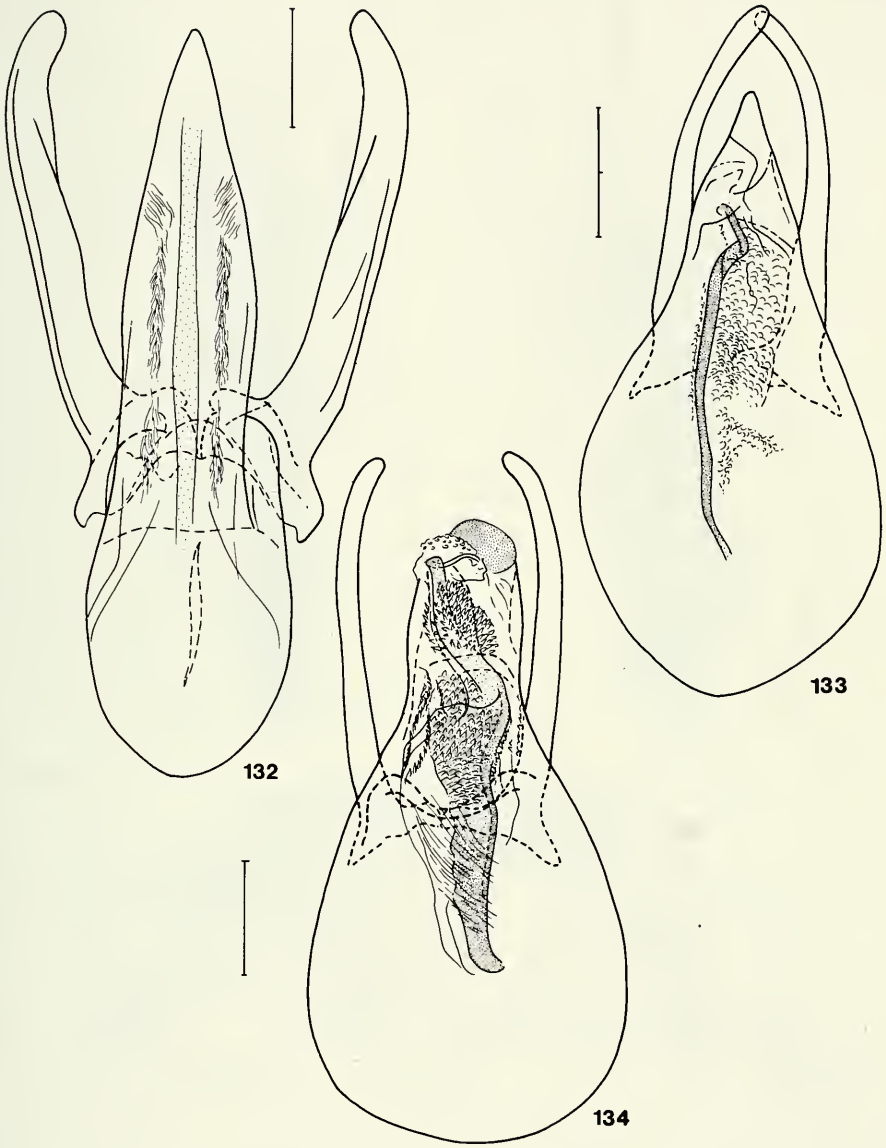
FIGS 126 TO 128.

Aedeagi in *Scaphisoma*; 126. *S. minutissimum* Champion; 127 and 128. *S. praesigne* sp. n. Scale bar = 0.1 mm (126), and 0.2 mm (127).



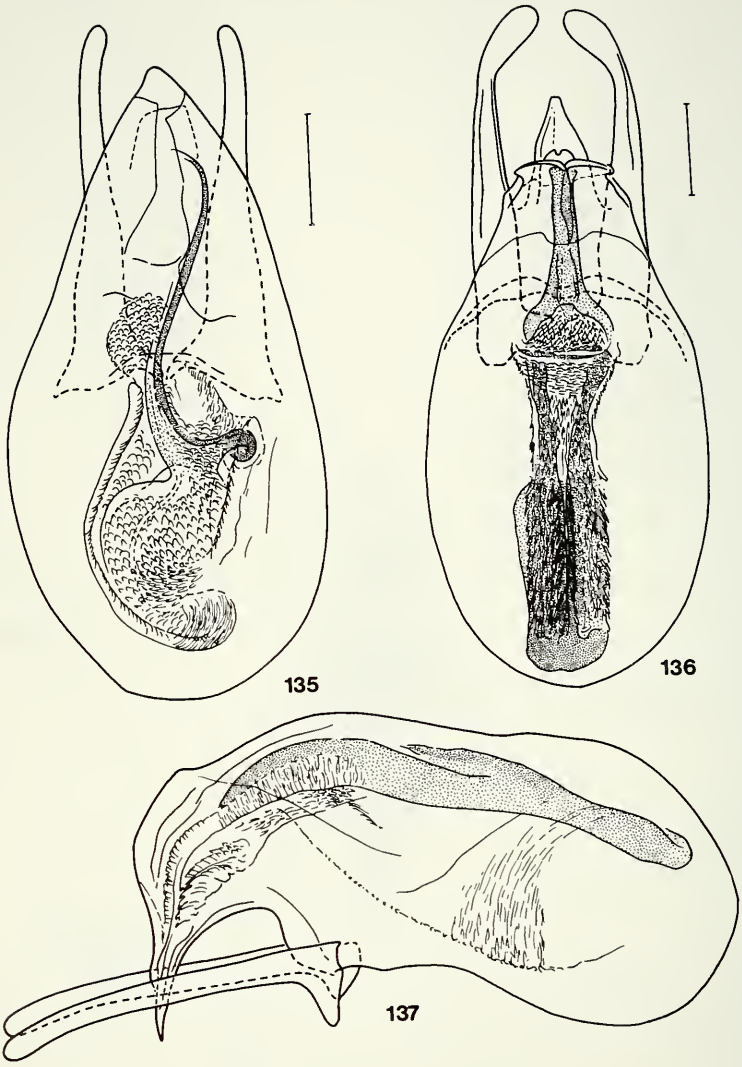
FIGS 129 TO 131.

Aedeagi in *Scaphisoma*; 129. *S. fulcratum* sp. n.; 130. *S. interjectum* sp. n.; 131. *S. simplicipenis* sp. n. Scale bar = 0.1 mm.



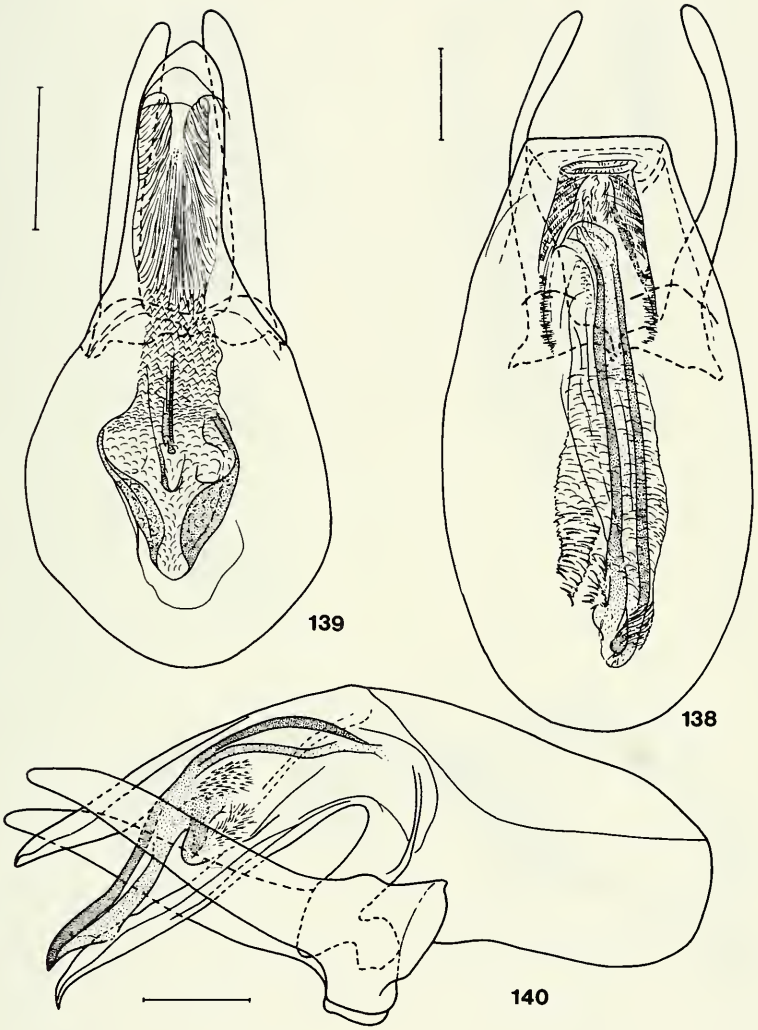
FIGS 132 TO 134.

Aedeagi in *Scaphisoma*; 132. *S. simpicipenis* sp. n.; 133. *S. fatuum* sp. n.; 134. *S. adjacens* sp.n. Scale bar = 0.1 mm.



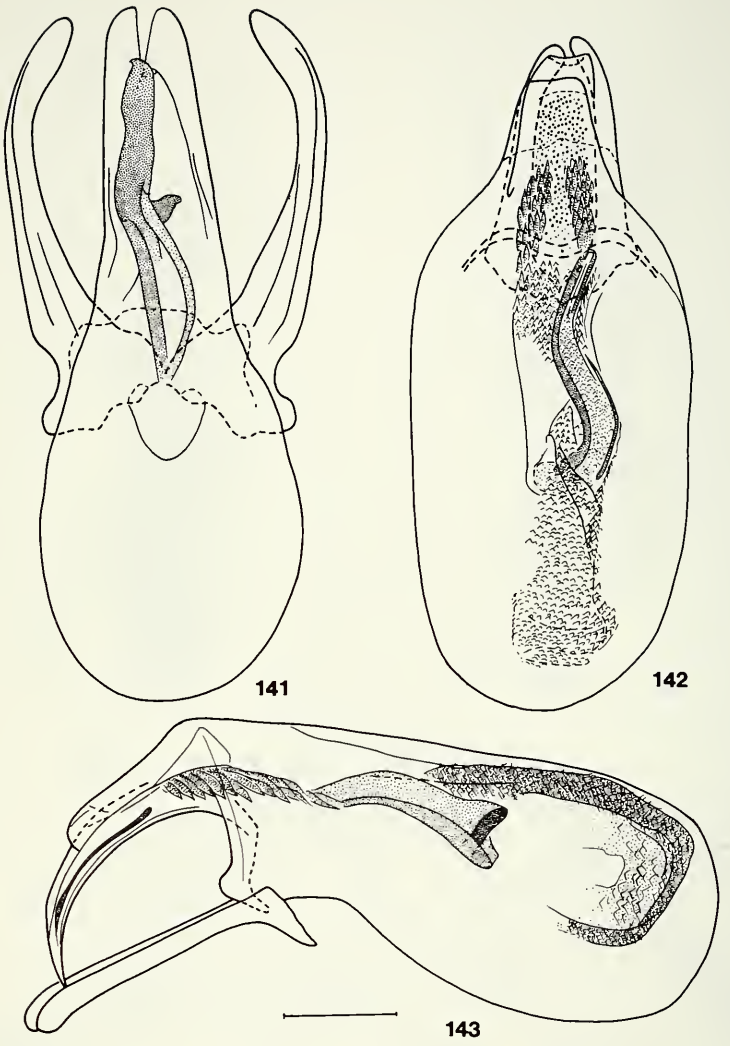
FIGS 135 TO 137.

Aedeagi in *Scaphisoma*; 135. *S. inquietum* sp. n.; 136. *S. fratellum* sp. n.; 137. *S. aurorae* sp. n. Scale bar = 0.1 mm.



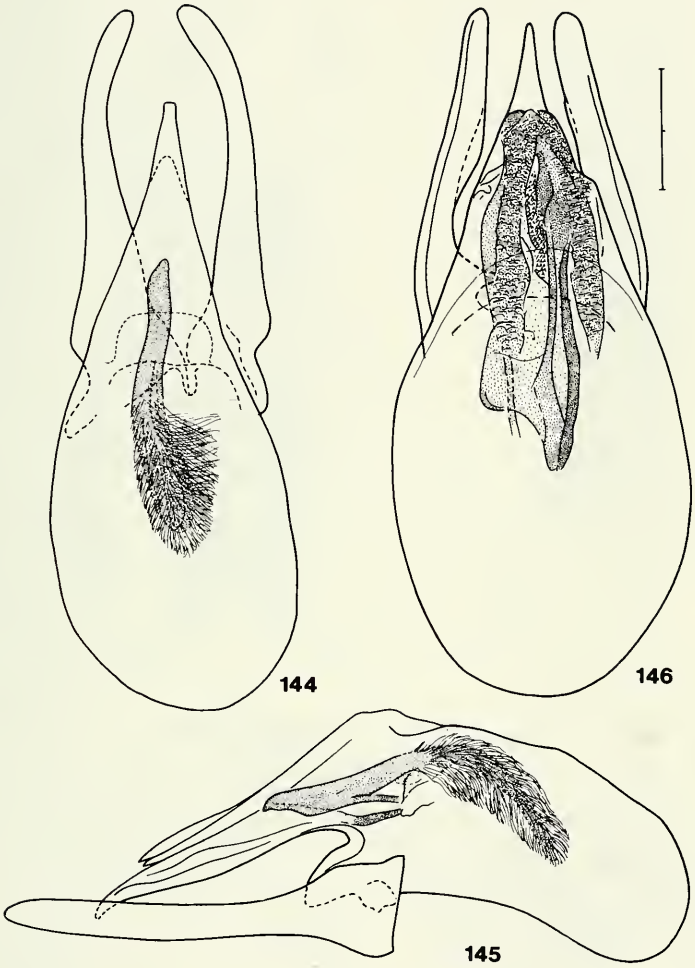
FIGS 138 TO 140.

Aedeagi in *Scaphisoma*; 138. *S. aurorae* sp. n.; 139. *S. nima* sp. n.; 140. *S. jado* sp. n. Scale bar = 0.1 mm.



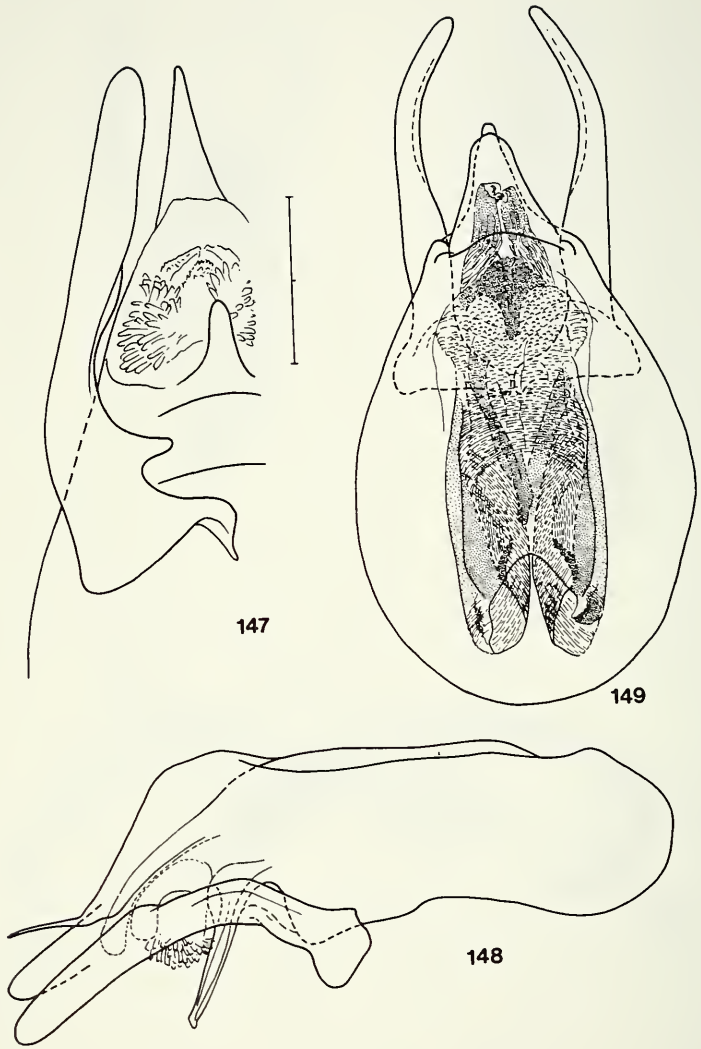
FIGS 141 TO 143.

Aedeagi in *Scaphisoma*; 141. *Scaphisoma jado* sp. n.; 142 and 143. *S. invalidum* sp. n. Scale bar = 0.1 mm.



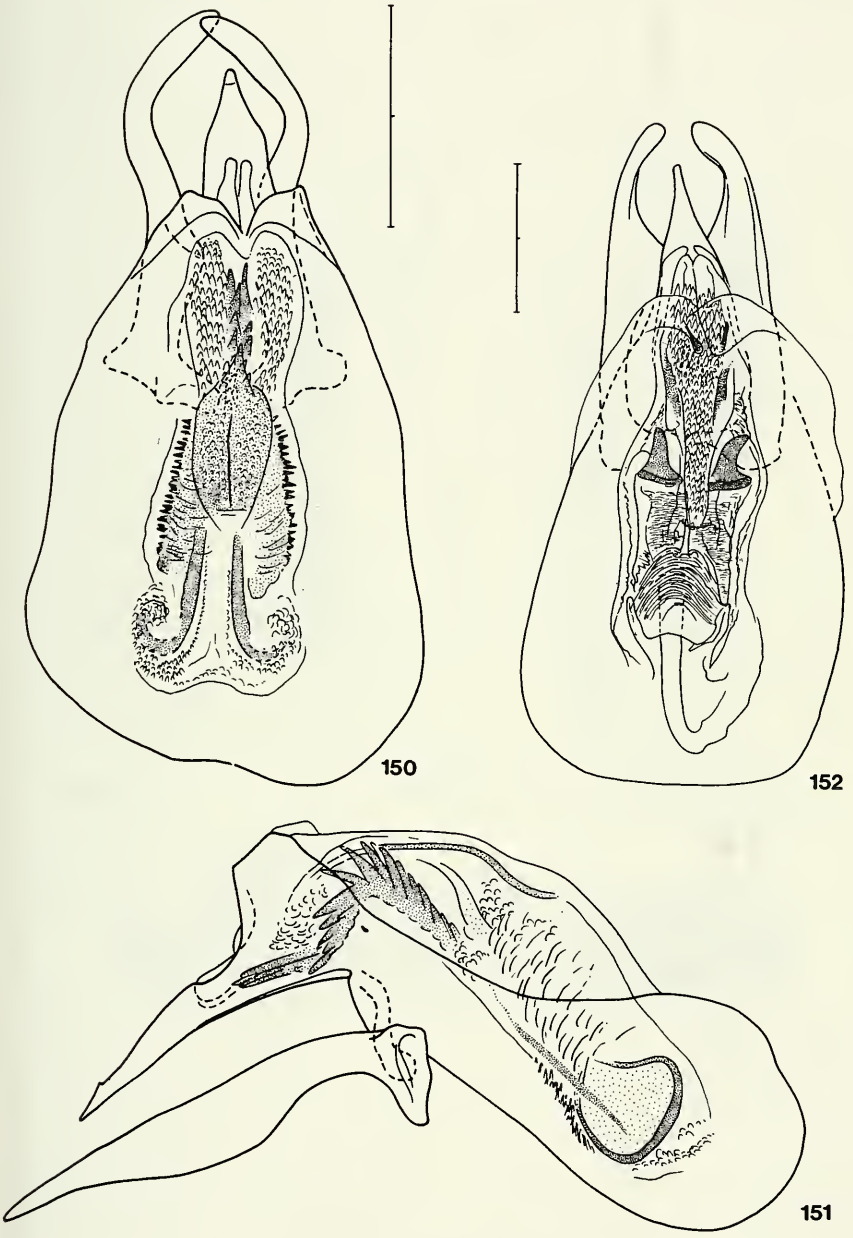
FIGS 144 TO 146.

Aedeagi in *Scaphisoma*; 144 and 145. *S. baloo* sp. n.; 146. *S. clavigerum* sp. n. Scale bar = 0.2 mm.



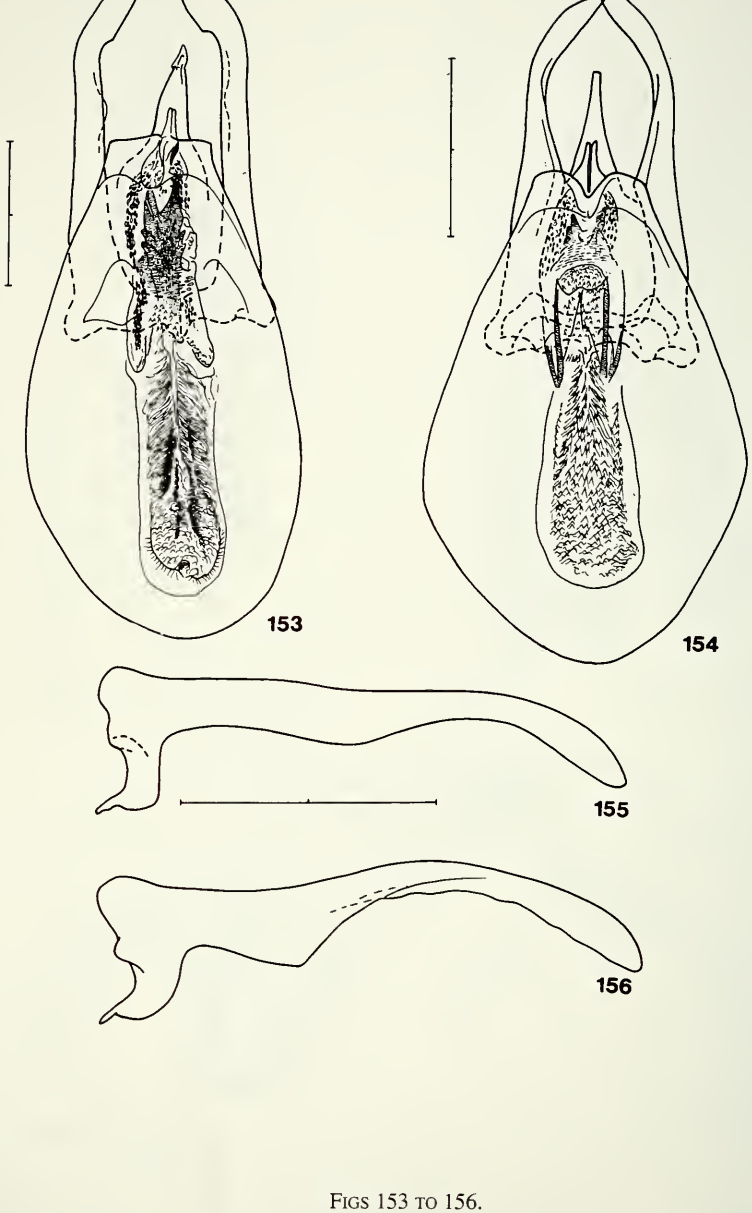
FIGS 147 TO 149.

Aedeagi in *Scaphisoma*; 147 and 148. *S. clavigerum* sp. n., paramere with apical portion of median lobe (147); 149. *S. assimile curvistria* Reitter. Scale bar = 0.2 mm.



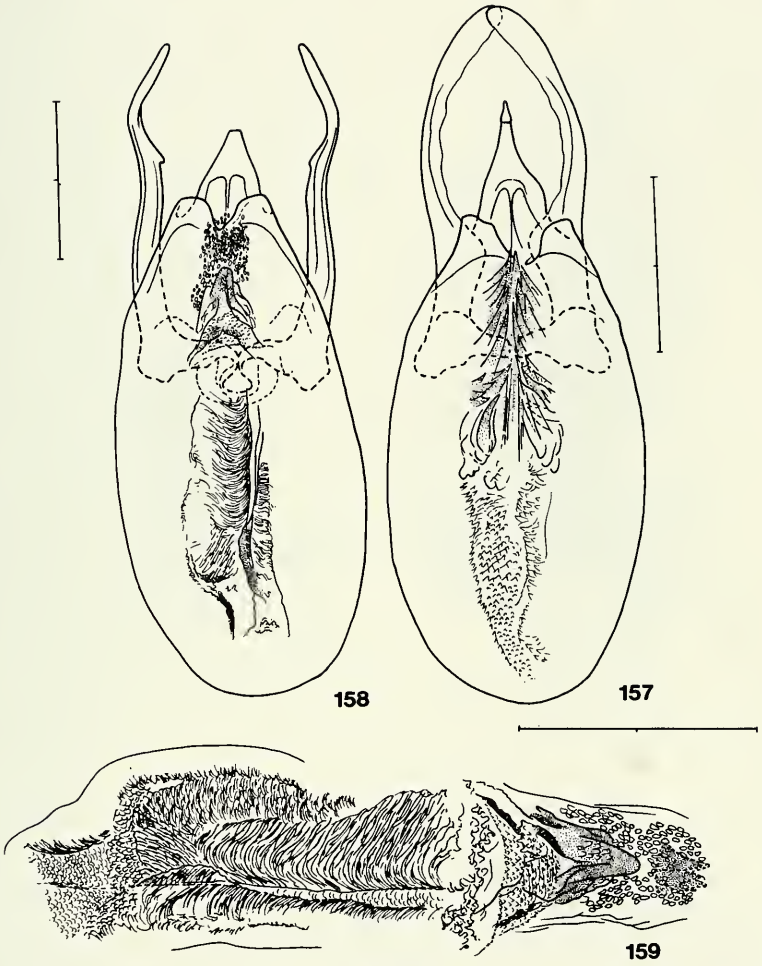
FIGS 150 TO 152.

Aedeagi in *Scaphisoma*; 150 and 151. *S. championi* Löbl; 152. *S. pinnigerum* sp. n. Scale bar = 0.2 mm.



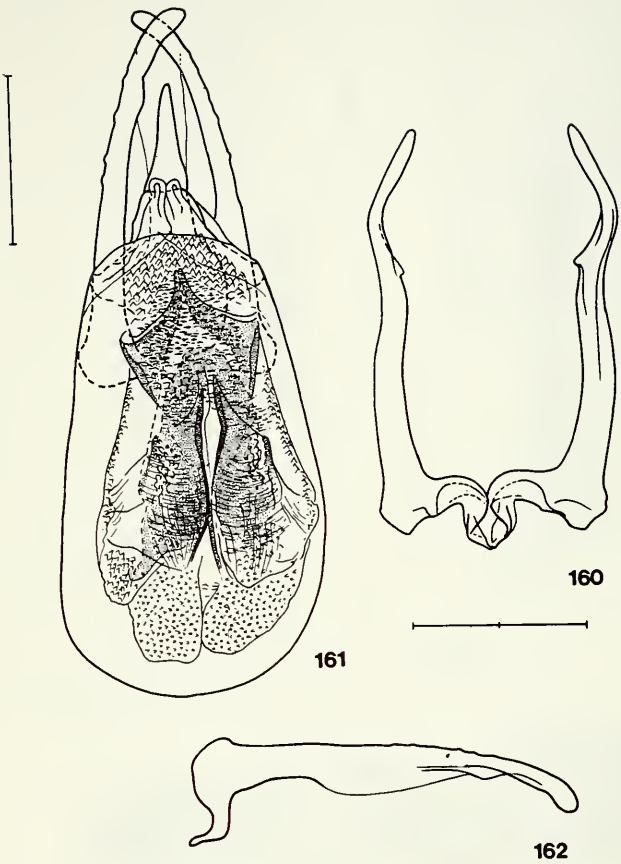
FIGS 153 TO 156.

Aedeagi in *Scaphisoma*; 153. *S. alacre* sp. n.; 154 and 155. *S. nepalense* sp. n., paramere (155) in ventral view; 156. *S. kanchi* sp. n., paramere in ventral view. Scale bar = 0.2 mm.



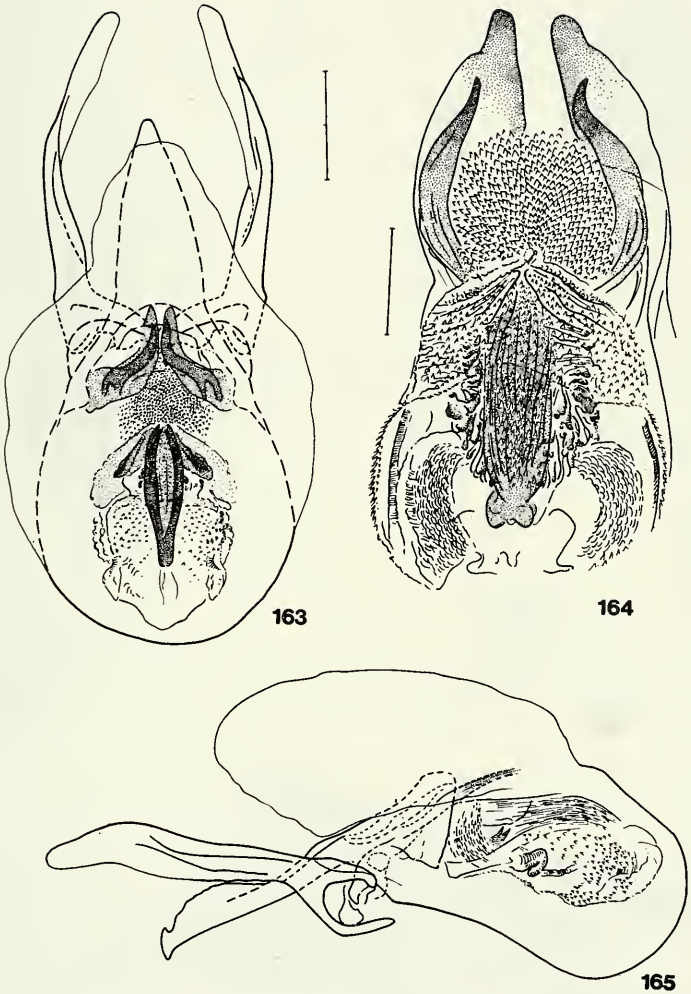
FIGS 157 TO 159.

Aedeagi in *Scaphisoma*; 157. *S. kanchi* sp. n.; 158 and 159. *S. coalitum* sp. n., internal sac (159) in detail. Scale bar = 0.2 mm.



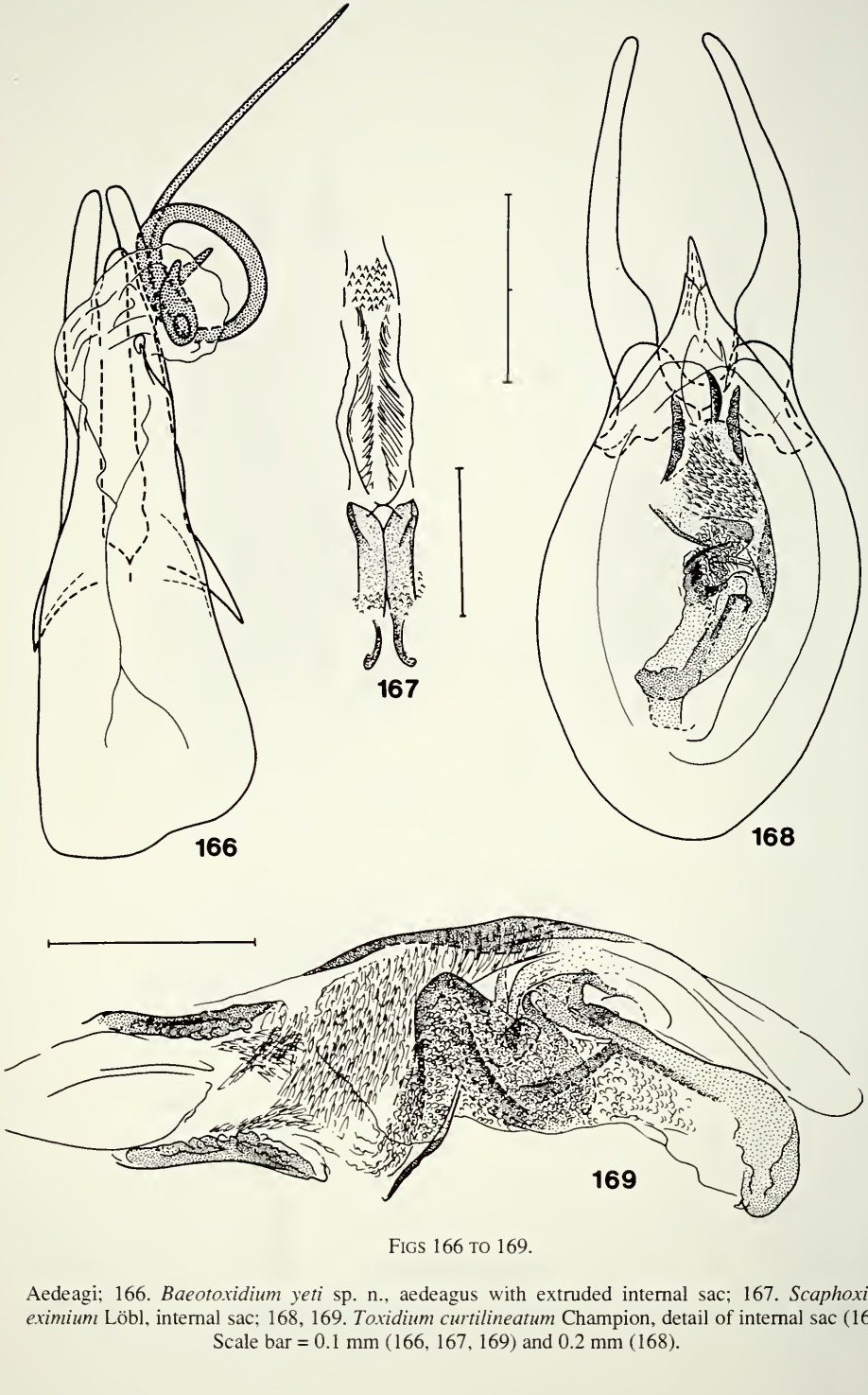
FIGS 160 TO 162.

Aedeagi in *Scaphisoma*; 160. *S. coalitum* sp. n., parameres; 161 and 162. *S. sikkimense* sp. n., paramere (162) in ventral view. Scale bar 0.2 mm.



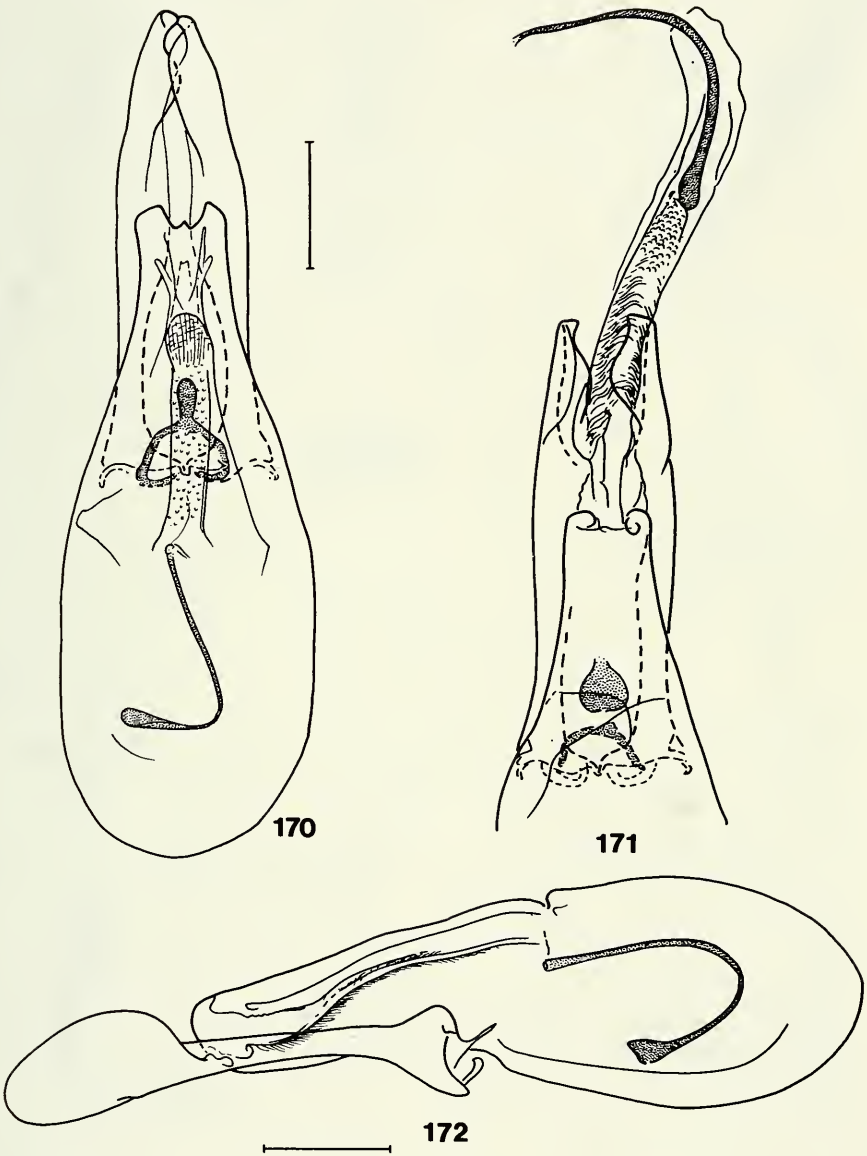
FIGS 163 TO 165.

Scaphisoma bhareko sp. n., aedeagus; internal sac (164) in detail. Scale bar 0.1 mm (164) and 0.2 mm (163).



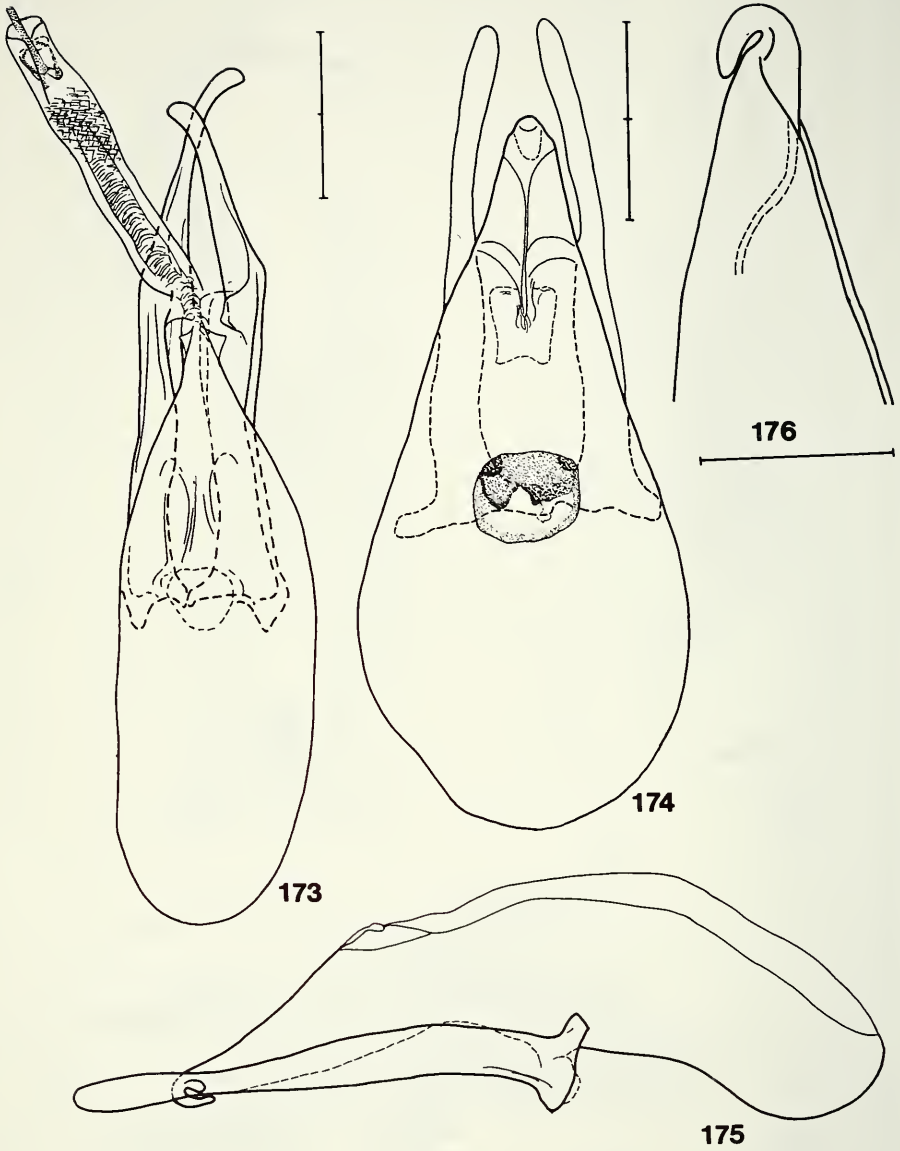
FIGS 166 TO 169.

Aedeagi; 166. *Baeotoxidium yeti* sp. n., aedeagus with extruded internal sac; 167. *Scaphoxium eximium* Löbl, internal sac; 168, 169. *Toxidium curtilineatum* Champion, detail of internal sac (169). Scale bar = 0.1 mm (166, 167, 169) and 0.2 mm (168).



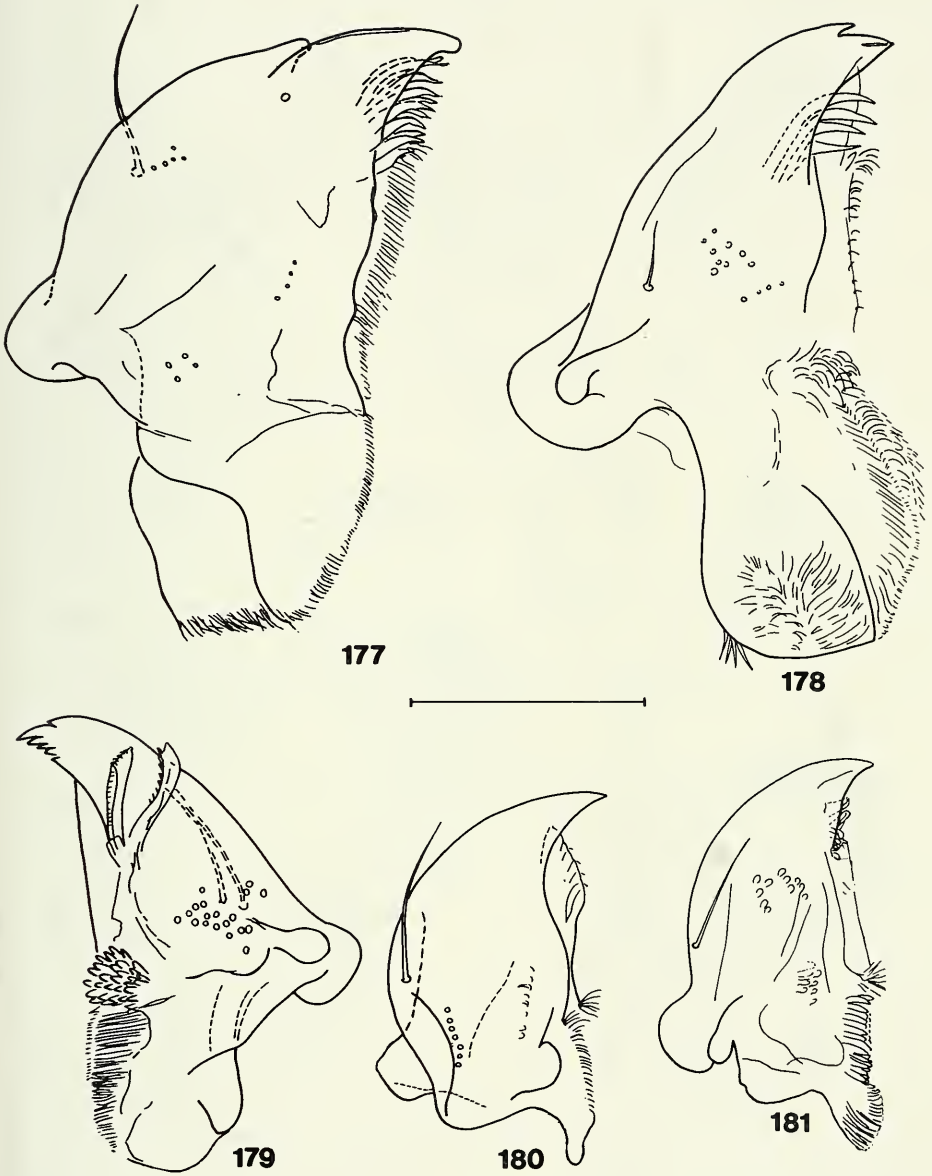
FIGS 170 TO 172.

Xotidium uniforme sp. n., aedeagus; apical portion with extruded internal sac (171). Scale bar = 0.1 mm.



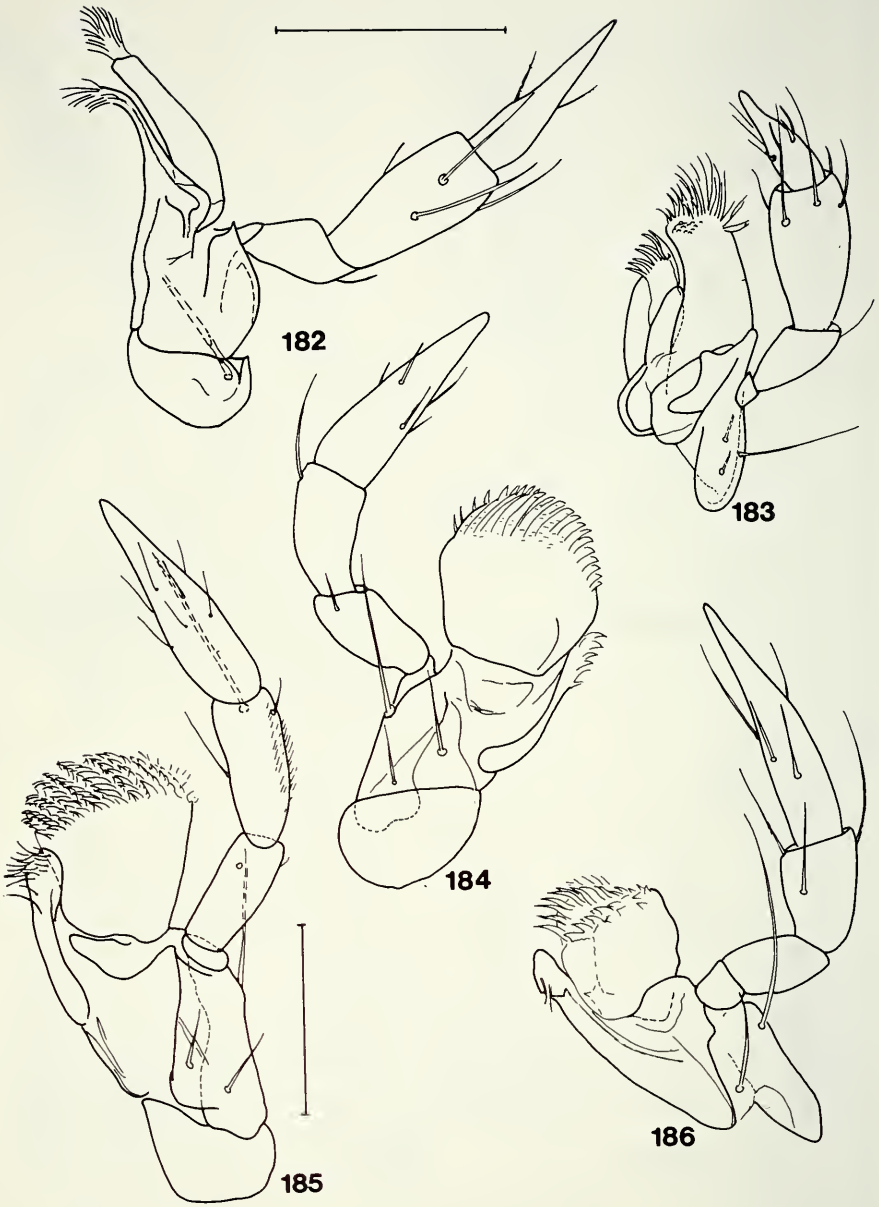
FIGS 173 TO 175.

Aedeagi; 173. *Scaphicoma arcuatum* (Champion); 174-176. *Bironium nepalense* sp. n., apical portion of median lobe (176). Scale bar = 0.2 mm (173-175) and 0.1 mm (176).



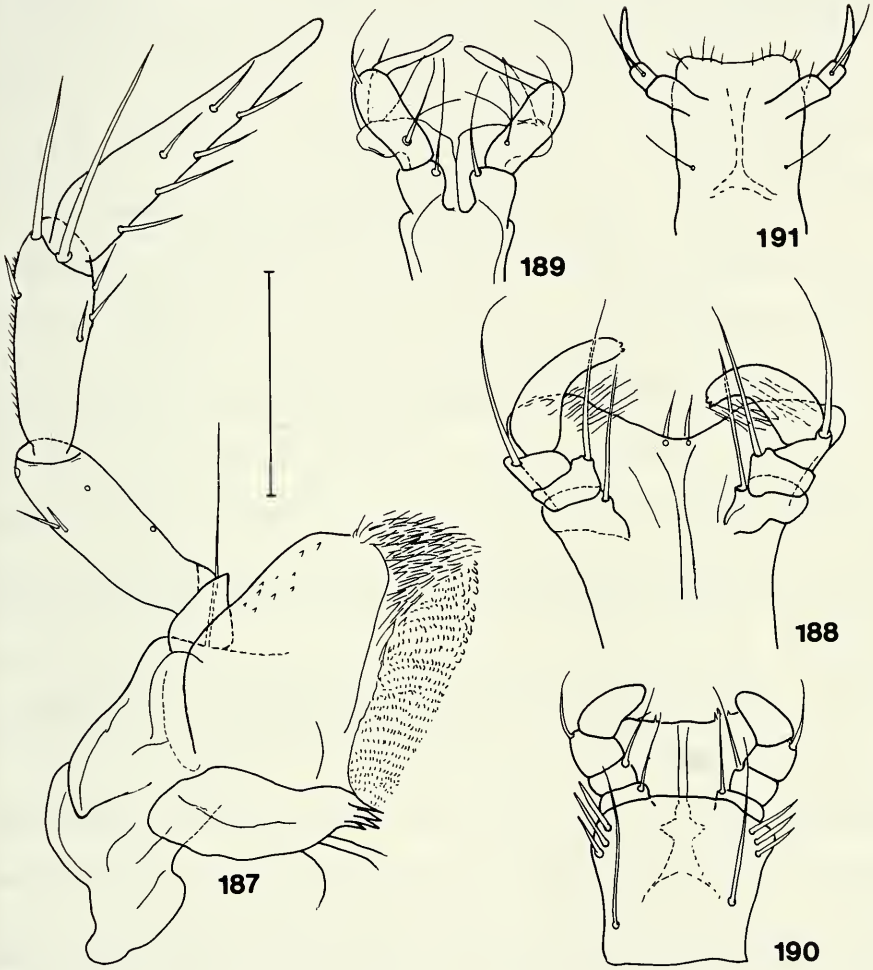
FIGS 177 TO 181.

Mandibles; 177. *Scaphicoma arcuatum* (Champion); 178. *Toxidium vagans* Löbl; 179. *Xotidium uniforme* sp. n.; 180. *Baeotoxidium lanka* Löbl; 181. *Scaphobaeocera japonica* (Reitter). Scale bar = 0.1 mm.



FIGS 182 TO 186.

Maxillae; 182. *Baeotoxidium lanka* Löbl; 183. *Scaphobaeocera japonica* (Reitter); 184. *Toxidium gammaroides* LeConte; 185. *Toxidium vagans* Löbl; 186. *Xotidium uniforme* sp. n. Scale bar = 0.1 mm.



FIGS 187 TO 191.

Mouthparts. 187, 188. *Scaphicoma arcuatum* (Champion), maxilla and labium with palpi; 189. *Xotidium uniforme* sp. n., labial palpi with hypopharynx; 190. *Toxidium gammaroides* LeConte, labium with palpi and hypopharynx; 191. *Baeotoxidium lanka* Löbl, labium with palpi and hypopharynx. Scale bar = 0.1 mm.

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